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ABSTRACT

This handbook provides information for University of Victoria faculty that will assist in the process of accommodating students with disabilities in the classroom or the laboratory. The focus of the handbook is on ways that instructors can modify the learning environment to facilitate learning for these groups, and it is divided into sections based on the common condition found for a particular disability. The handbook begins with a general discussion concerning students with disabilities and presents general guidelines to assist faculty and staff to determine what accommodations are best for facilitating disabled students' learning in each individual case. Next, information is presented about the school's available support services: student and ancillary services; counseling services; and health services. Discussions concern accommodating students who exhibit the following disabilities: visual impairment, hearing impairment, speech and language impairment, learning disability, physical impairment (e.g., the student with epilepsy), chronic health problems (e.g., the student with diabetes), and psychiatric disability. Appendices include the University of Victoria Senate Statement on Quality Teaching and Learning, the University of Victoria Policy on Access by the Disabled to University Services and Facilities, and a section of a university report involving students with Acquired Immune Deficiency Syndrome. Contains 27 references. (GLR)

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ACCOMMODATING a STUDENT with a DISABILITY:

SUGGESTIONS for FACULTY

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ACCOMMODATING a STUDENT

with a DISABILITY:

SUGGESTIONS for FACULTY

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1991

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Jennifer Leigh Hill

FOREWORD

Prediction about the future of university education is a risky exercise. At the same time, it does seem safe to predict that the current trend towards diversity in the student population will continue: diverse in culture, diverse in age, diverse in race and religion, and finally diverse in the variety of disabilities that a growing number of students will bring with them to their university studies.

At UVic our policy on Access by the Disabled to university services and facilities is primarily concerned with ensuring physical access. As teachers, we have an important duty to ensure that students with disabling conditions have fair access to the various aspects of learning inside and outside the classroom and the laboratory.

Now we cannot expect to be familiar with all the unique challenges of a particular disability. However, this handbook takes us a number of steps on this important journey of understanding, and our students who have disabilities will be able to help us to further our understanding. As the handbook stresses, each student is an individual with his or her own needs: no additional solutions can be given for any group. What the reader will find is a set of suggestions designed to aid in finding solutions for each individual circumstance.

I have learned a great deal from my reading of this handbook. For example, many of the suggested "accommodations" for a student with a disability are, in fact, likely to enhance the learning of all students and the instructor's teaching. Above all, the handbook serves to remind us that each student should be treated in a decent fashion that respects her or his dignity as a person.

Many individuals have contributed to the creation of this handbook, including all those who attended and participated in the third, and last, of a series of workshops on Equity Issues, jointly sponsored by the Equity Office and the Learning and Teaching Centre. However, I must thank, in particular, Professors Norma Mickelson and Andy Farquharson, Mr. David Clode, and, above all, Professor Jennifer Hill who wrote this splendid handbook. We are all in her debt; yet, I'm sure she'd agree, appropriate employment of her suggestions will quickly cancel that debt!

Dr. Samuel E. Scully
Vice-President Academic and Provost

INTRODUCTION

There has been a dramatic increase in the number of students with disabilities[1] attending postsecondary institutions in Canada since the early 1960s. It is not known how many students with a disabling condition attend university at present in Canada. However, it is estimated by the National Educational Association of Disabled Students (NEADS) that 8 to10 percent of the total postsecondary student population has a handicapping condition. Currently at the University of Victoria, there are approximately 75 students with special needs who receive assistance from Student and Ancillary Services. It is very likely that this number does not accurately reflect the total number as many students may be attending the University and not be known to the Coordinator of Services for Students with Disabilities.

The needs of students with disabilities vary, depending on the type of disabling condition, the severity of the condition and, in some cases, the length of time that the student has had the condition. The purpose of this handbook is to provide information for UVic faculty that will assist in the process of accommodating this unique group of learners in the classroom or the laboratory. The focus is on ways that instructors can modify the learning environment to facilitate learning. Many of the suggestions are general in nature. However, it is hoped that they are appropriate not only for students with special needs, but for all students.

No two students, even if they have the same disability, have the same needs. It would be impossible to provide "solutions" to all the possible "situations" that might arise in working with a student with special learning needs. However, it is hoped that the suggestions offered will help facilitate discussion between a faculty member and an individual student. It is important for instructors to be available to meet with a student to discuss any problems that may occur, hopefully before they occur. The student, in all likelihood, has already faced similar challenges in his/her high school career and has already found a "solution" that works for him/her. Often, what may seem to an instructor to be a major obstacle to learning, in reality, requires a minimal amount of change by those who are willing to assist a student reach his/her potential. As one senior with a disabling condition stated: "Once you get to know a person on a thinking and feeling

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[1] For the purpose of this document, the terms "students with disabilities", "students with disabling conditions", and "students with special needs" will be used synonymously. See section entitled "Words with Dignity" in Appendix C.

level, any difficulties usually iron themselves out. It's communication ... I'd encourage people to make that first step ... get to know a handicapped person -- they're just as neat as so-called 'normal people'" (Penn & Dudley, 1980, p. 357). A student with a disability does not want to receive undue attention. Rather, s/he wants to be accepted in the same manner in which any other student in the classroom would be accepted.

Students with Disabilities

Traditionally, students with disabilities are grouped according to the presenting condition (e.g., loss of vision), implying that as a group (i.e., "the blind") their needs are identical. In reality, however, there is much variation within each group[2] . All that students with a visual impairment have in common, for example, is a condition that affects the ability to see. Not all individuals will require the same kinds of learning materials or the same types of modifications to the learning environment. Some students with a visual impairment may require braille, others may require large print, and still others may be able to use optical aids, such as magnifiers, to read regular-size print; some students with a vision loss may be able to read from the chalkboard or from overhead transparencies, others may not have sufficient vision to see at distance; some students with decreased visual acuity may function adequately with regular overhead lighting, others may benefit from additional lighting, in the form of a clip-on light attached to the desk.

Even though this handbook is divided into sections based on the "common" presenting condition, individual differences must be considered in planning how to best modify a program for a student with a disabling condition. What is best for one student, may, in fact, be a hindrance to learning for another. As previously stated, the best approach is that of discussing individual needs with a particular student. Faculty, however, must be cognizant of the fact that the student may be reluctant to approach an instructor to discuss his/her unique learning needs. In some cases, the instructor must approach the student first. By announcing at the initial class session that an instructor is willing to discuss any special learning needs, the instructor may encourage students to discuss the issue before an excessive amount of time has elapsed.

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[2] To reflect the individual needs of each student, terms such as "the disabled", "the handicapped", "the blind", "the deaf", and "the learning disabled" will not be used in this document. Each person with a disabling condition is an individual who happens to have a special need that may impact on his/her ability to pursue a postsecondary education. Consequently, terms such as "a student with a visual impairment" or " a student with a loss of hearing" will be utilized.

Even though there may be differences within a "group", there are often similarities between "groups". The needs of a student with a visual impairment may appear to be significantly different from the needs of a student with a hearing loss. However, in both cases, a student's prime need is having a supportive instructor who is willing to be flexible. In most cases, making some type of accommodation will not require an excessive amount of work on the part of an instructor. Even though this handbook is designed so that an instructor of a student with a particular handicapping condition can refer to the section that applies to the student in question, instructors are encouraged to read the other sections as well, as they may find ideas that may be of assistance in working with students in a particular teaching situation, regardless of the presence or absence of a handicapping condition.

General Guidelines

Scott (1990) proposed a set of guidelines that can be used to assist faculty and staff in determining whether or not an "otherwise qualified"[3] student with a disability should be accepted into a postsecondary program and, upon acceptance, the nature of the accommodations that are reasonable in order to facilitate learning for that student during his/her academic program. Scott's guidelines were established specifically for a student with a learning disability. However, the questions raised are appropriate for determining the status of all students, regardless of a disabling condition.

I. **Determining Essential Components** (pp. 403-404)

A. What is the purpose of the program or course?

B. What are the outcome variables that are absolutely required of all participants?

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[3] The term "otherwise qualified" student comes from Section 504 of the Rehabilitation Act of 1973 of the United States of America. The act states "No otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance [e.g., postsecondary institutions receiving federal assistance in the form of financial aid to students]." For a discussion of the interpretation of this term, the reader is referred to the article by Scott (1990) entitled "Coming to Terms with the 'Otherwise Qualified' Student with a Learning Disability", Journal of Learning Disabilities, 23, 398-405.

1. **Program**

   a. What skills or competencies will be needed in the field after graduation?
   b. What are the requirements for licensing or professional accreditation?

2. **Course**

   a. What academic skills must be demonstrated?
   b. What percentage of subject area knowledge must be mastered?
   c. What specific knowledge, principles, or concepts must be mastered?

C. What methods of instruction are non-negotiable? Why? (For example, auditory presentation of musical compositions may be deemed absolutely necessary in a music appreciation class because of the designated nature and purpose of the course.)

D. What methods of assessing outcome variables are absolutely necessary? Why? (For example, a nursing student's proficiency in starting an IV [intravenous] must be assessed by physical performance because of skill development required by the major and/or licensing requirements.)

E. What are acceptable levels of performance on these measures? (For example, 100 percent of program competencies must be demonstrated; 85 percent of exam questions must be answered or performed correctly.)

II. **Considering Reasonable Accommodation** (p. 404)

A. What alternate methods of instruction could be used to present essential program or course components while involving different perceptual or cognitive abilities? (For example, the traditional format of oral lecturing could be supplemented with advance organizers or the use of an overhead projector to highlight key concepts.)

B. What auxiliary aids might be beneficial to the student? (For example, taped texts might help the student with a learning disability complete assigned readings.)

C. In what ways is the instructor willing to facilitate the use of auxiliary aids? (For example, the instructor might ask the class for volunteer notetakers or peer tutors.)

D. What alternate methods of evaluation could be considered for assessing essential outcome variables? (For example, a traditional paper-and-pencil math exam could be performed orally by a student with a learning disability.)

E. How will these alternative measures be evaluated? (For example, will process as well as product be assessed?)

F. What are acceptable levels of performance on the alternative measures? (For example, how heavily will process and product performance be weighted?)

G. How will scores from alternative measures be equated with traditional standards? (For example, how will oral presentation of exam questions be compared with other students' written responses?)

H. Will the use of any of the above accommodations compromise the accomplishment of essential requirements?

III. **Student Variables** (p. 404)

A. What pre-existing abilities or skills must all participating students possess?

B. Is there a minimal level of proficiency in these abilities?

C. Does the ability or skill necessarily need to be performed in a prescribed manner?

D. Does the student understand the essential purpose of the course, and any subsequent restrictions on accommodating methods of instruction or means of evaluation?

E. Can the student meet all essential requirements in spite of his or her learning disability when given reasonable accommodation?

F. Will accommodating individual needs pose a risk to personal or public safety?

SUPPORT SERVICES

Many services are available at the University of Victoria to support students with disabilities and faculty members working with these students. The primary service providers are located at Student and Ancillary Services, Counselling Services and Health Services.

Student and Ancillary Services

Location: University Centre, Room B-215
721-8024

Contact: Coordinator of Special Student Programs

Student and Ancillary Services provide a variety of services to students with special learning needs. The Coordinator is available to discuss ways by which instructors can modify the learning environment to meet the unique needs of students with disabilities.

Services available to students and faculty from Student and Ancillary Services include:

- Advising (e.g., regarding registration or accessibility).
- Obtaining tutors, readers, persons to tape books, notetakers, interpreters, and/or personal assistance attendants.
- Providing written/audio-visual information on available services located both on campus and in the local community.
- Acting as a liaison to faculty and administration on campus and to community service providers.
- Acting as a student advocate.
- Providing special equipment (e.g., adaptive computers, braillers, amplification devices for the deaf, closed circuit television systems).
- Arranging for special testing options (e.g., extended time).
- Facilitating group discussion sessions.

Counselling Services

Location: University Centre, Room B202
721-8341

Hours of Operation: Monday to Friday, 8:30-4:30

Students with disabilities may have special concerns around relationships, career prospects, or dealing with the emotional/psychological aspects of a recent disabling condition. Faculty can refer students to Counselling Services. Counselling Services offer confidential professional help to UVic students wishing to solve these problems or discuss these types of concerns. The service is free except for a nominal charge for some tests and courses.

Career Counselling

Career counselling individually or in groups can assist students in clarifying their interests, abilities, values, needs and goals, and in learning how to use this information to determine which careers (and thus, majors) best suit them.

- Selecting a major
- Development of career exploration skills
- Determining one's abilities, needs, values, goals
- Interest testing
- Decision-making skill development
- Computerized career search program

Personal Counselling

There is both individual and group counselling for students who find that personal problems are interfering with their performance while at the University.

- Self confidence
- Stress and anxiety
- Relationship problems
- Depression
- Sexual questions
- Loneliness
- Eating concerns
- Your special situation
- Assertion
- Family
- Sexual/physical abuse
- Disabilities
- Loss and grief
- Decision making
- Drug or alcohol problems

Learning and Study Skills Program

Individual appointments and group programs are available to assist students in developing and refining attitudes and methods that are

important for educational growth, intellectual stimulation, efficient studying and academic success. Topics covered include:

- Managing time
- Remembering
- Making and using notes
- Reading for learning
- Thesis completion
- Organizing information
- Reading speeds & methods
- Preparing for exams
- Writing exams
- Increasing motivation
- Writing essays and reports
- Studying methods
- Setting priorities

In addition, Counselling Services offers a course in the early fall and spring and a two-week course in August. Short workshops are also held throughout the year. A nominal fee is charged.

Group Study

Students enrolled in a common course can receive assistance in setting up and conducting group study sessions.

Career and Personal Groups

Throughout the year the following groups are held:

- Career planning and testing
- Decisions
- Relaxation
- All but thesis
- Wellness
- Improving self esteem
- Stress management
- Migraine relief
- Assertion training
- Getting past your family past
- Public speaking

Health Services

Location: Southeast Corner of Parking Lot No. 5

Hours of Operation: 8:30-4:30, Monday to Friday
except Thursday 9:30-4:30

Health Services offers general medical treatment, health counselling, nutritional consultations, physiotherapy, dermatology, gynecology, sports medicine clinics and psychiatric services for the benefit of students.

VISUAL IMPAIRMENT

Individuals with a visual impairment (i.e., decreased visual acuity) are grouped into three major categories: partially sighted, legally blind and educationally blind. Visual acuity is measured in the best eye and with best correction (i.e., with glasses and/or contact lenses, if worn).

A. A person who is **partially sighted** has vision in the range of 20/70 to 20/200 (i.e., s/he sees at 20 feet what a person with normal sight sees in the range of 70 to 200 feet). An individual with partial sight, in most cases, will be able to manage reading regular size print, with or without a magnifier. For many, distance vision may be severely limited (e.g., s/he will encounter difficulty with board work).

B. A person who is **legally blind** has 20/200 vision or less (i.e., s/he sees at 20 feet what a person with normal sight sees at a distance of 200 feet or more). The term "legal" refers to the fact that the individual is entitled, by law, to certain benefits (e.g., specific exemptions for income tax purposes) as a result of the visual restriction. Most people who are "legally" blind are <u>not</u> totally blind (i.e., they have useful residual vision). The visual condition is, however, of such a severe nature that most visual tasks, both at near and at far, will be impeded.

C. A person who is **educationally blind** is unable to read print, regardless of its size, and consequently must rely on a tactual form (i.e., braille) or on an auditory form (i.e., talking books) of print. A student who is referred to as being educationally blind may have some residual vision (e.g., form perception) that may assist in mobility (e.g., movement from building to building). However, in the classroom, the student's vision is not sufficient to allow reading print, either at near or at far, regardless of the availability of optical and/or nonoptical aids.

Some students with visual impairments may have a restriction in the **field of vision**. Some may have good central vision but lack the ability to see in the periphery of the visual field (commonly known as **tunnel vision**), whereas others may have good **peripheral vision** but lack central vision. Some individuals, such as those with a vision loss as a result of diabetes, may have **scotomas**, or blind spots, throughout the visual field. With a visual field loss, a student may have difficulty in certain tasks, such as using a microscope.

Some normally seeing individuals (i.e., those with 20/20 vision) and some students with a visual impairment (i.e., partially seeing or legally blind) may have a problem in the perception of color. A person who is **color blind** usually does not have a total loss of color vision, but rather

has difficulty distinguishing certain colors. The most common problem is in the area of red-green confusion, followed by yellow-blue confusion. A very small number of individuals may be unable to distinguish any colors (i.e., all hues tend to be seen as shades of gray). Loss of color vision may impact on the learning of some individuals (e.g., determining color reactions in laboratory experiments).

Instructional Accommodations

- Instructors should provide students with a list of assigned textbooks and readings as early as possible. Ideally, a detailed syllabus should be made available before the commencement of the course. Students who are unable to read print due to their vision loss will need to make arrangements to have books taped or brailled. There is a minimum of a six-week time lag in ordering books on tape or in braille, even if the book is available from a known source (e.g., CNIB). If the book must be taped or brailled, more than six weeks may be required. It is important that instructors also provide information on when certain chapters (particularly if they will be assigned non-consecutively) and readings will be covered in class, since it is often the case that a book will be taped/brailled over the course of the year/term and will not be available in its entirety before the start of the course. It is also helpful if instructors inform students as to whether or not it is important to have the complete work taped or brailled. If only certain sections are required, such information will save time and/or money.

- Lecture style will not have to be modified greatly to accommodate students with visual impairments. Talking naturally and using words like "see" and "look" are appropriate. Words such as "this" and "that" when pointing to the chalkboard may be meaningless to students unable to see where the person is pointing. Even though students who are totally blind or color blind may not be able to differentiate between colors, the use of words denoting color are appropriate. Body language (e.g., a nod of the head) should not be used solely when answering a question because students with decreased visual acuity may be unable to see the gesture.

- It is not uncommon for nondisabled individuals to shout at persons with a visual impairment. This is not appropriate as most people with a visual loss do not have a concomitant hearing loss. The instructor should speak directly to the student and not talk through a third person, such as a person accompanying the student (i.e., a sighted companion or guide).

- Notetaking may be difficult, particularly for a student with low vision who may print very slowly. Generally such a student will make arrangements with a fellow classmate to photocopy his/her

notes after class. An instructor may assist the student in choosing a peer for notetaking by asking for volunteers or by asking a student, known to the instructor for taking good lecture notes, to volunteer. Many students would appreciate receiving a copy of the lecture notes after attending a lecture. However, instructors are not required to provide this service, unless they volunteer to do so. Students using braille usually are able to take lecture notes independently, with a braille-writer, a computer, or a slate and stylus. However, speed may be slower than that of a normally sighted student. Some braille-using students rely on notetakers (i.e., persons who either volunteer or are paid to take notes).

- Many students with a visual loss may prefer to tape-record lectures. Students should obtain permission from the instructor to do so. Students are required to bring their own tape recorder and a sufficient number of blank tapes. The best quality tape recording is generally made by placing the tape recorder on or near the instructor's desk/podium. It is important that the instructor remain fairly stationary (i.e., not walking from the front to the back of the room) to ensure that the voice is adequately recorded. In large lecture halls, it will be of assistance if the instructor repeats or rephrases questions from the audience seated away from the tape recorder to ensure that the voices are properly recorded. For students who are unable to recognize faces at distance, it would be of assistance if classmates identify themselves when they speak.

- Students with a visual loss may need preferential seating (e.g., students with residual vision may appreciate being allowed to sit close to the chalkboard and/or the instructor; students who are going to tape lectures or use a laptop computer for notetaking may need to be seated near an electrical plug; students who are particularly light sensitive may want to sit away from a window). In most cases a student will select the seating arrangement that is most appropriate for his/her needs. However, if seating is on an assigned basis, the student's visual needs must be taken into consideration. Students should initiate the request for preferential seating prior to the seating assignment being made.

- The materials and equipment used by a student with a visual impairment are often bulky (e.g., a braillewriter is about the size of a small typewriter; braille books are much larger than the standard print book). Consequently, a student may need an oversized desk. Students can request such equipment from Student and Ancillary Services.

- For students who do not have sufficient vision to follow material on the chalkboard, it is important that the instructor read the material as it is being written and describe, in detail, the charts, graphs, and

pictures so that the students will be able to follow the lecture and take notes. For students who are able to cope with chalkboard work, the material should be clearly written (i.e., in block letters with adequate spacing between words). Good contrast will enhance visual material (i.e., the chalkboard should be clean before material is written on it). Most chalkboards at UVic are green in color. Instructors may want to experiment with different chalk colors to ensure good contrast. Some students report that yellow chalk on a green board produces maximum visibility. Ideally students will benefit from the use of flipcharts in which maximum contrast can be obtained (i.e., black or dark brown on buff or white background).

- The use of overhead transparencies may cause difficulties for some students. As in the case of chalkboard work, verbalizing material presented will be of assistance. Students with partial sight will benefit greatly from having photocopies of all overhead materials. The noise of the fan of an overhead projector can be very distracting for students with visual impairments. Ideally the overhead projector should be turned off when not in use.

- All handouts should be of good quality (i.e., maximum contrast) to ensure that students will be able to read them. The materials should be clearly written, with adequate white space between words, paragraphs, and diagrams. If a student needs enlarged copies, s/he should make arrangements privately to have the material enlarged. In some cases, the instructor may offer to provide this service. However, it is not the instructor's responsibility to do so.

- Films, slides, movies and videos should be shown as planned. It may be beneficial for a student to borrow materials before/after class for a private showing (e.g., so that the student can sit close to the screen or television set and not block the view of other students). For a student with no residual vision, having a person (e.g., a classmate or the instructor) describe what is being shown on the screen may be of assistance. The rest of the class should not, however, be disturbed by the sound of voices.

- Some laboratory work may be difficult for visually impaired students. Assigning a sighted partner from the same class may be beneficial. In some cases a "volunteer" may be hired to assist the student. Even though a student may have assistance, s/he should be expected to do as much as possible, and only rely on assistance when lack of vision precludes performing the required task.

- Visually impaired students are very cautious in a laboratory environment and should not be thought of as "safety hazards". Materials (e.g., chemicals) and equipment should be clearly

labelled, in large print and/or in braille, and all materials/equipment should be stored on shelves similarly labelled. Staff from Student and Ancillary Services can assist in the labeling of materials and equipment.

- Students who are severely visually impaired should have a complete orientation to the instructional setting prior to classes starting so that they will know where equipment is located and where the instructor's desk is situated. Students are required to make arrangements with the instructor/lab assistant for an orientation prior to the start of the term.

Assignment Accommodations

- Some assignments of a highly visual nature may be difficult for a student with a severe visual impairment (e.g., drawing complex graphs). In some cases, it may be necessary to assign alternative projects or an alternative form of the assignment (e.g., a verbal report rather than a written/drawn project). The student should meet with the instructor to discuss any modifications of this nature, before the start of the course.

- Library research may be difficult for a student who is visually impaired. A sighted reader may be required to read the materials to the student and/or to tape the books/articles. Consequently, it is important to give the student ample lead time to complete assignments. Instructors should be willing to extend deadlines for completion of assignments if gathering materials is problematic. Students are responsible for discussing such problems with instructors, prior to the due date of an assignment.

Examination Accommodations

- Students should discuss the need for modifications for tests and examinations with the instructor in order to make special arrangements if they are required. In many cases, the only accommodation necessary is that of providing extra time. Generally, students with partial sight are slower in reading (due to the extra effort required to interpret the print) and writing (due to the need to print larger than normal). Consequently, allowing extra time will compensate for the loss of vision. Similarly, it should be noted that for a student who is educationally blind, reading and writing braille is considerably slower than reading or writing print. Arrangements can be made with Student and Ancillary Services to have someone invigilate examinations if additional time is required. In many cases the student or the instructor can arrange to have the exam/test supervised by a librarian, a graduate student or a secretary.

- Some students with partial sight may need to have the exam printed in large type. As most photocopiers have the capability of enlargement, a secretary could easily accommodate this request. If such equipment is not readily available, staff from Student and Ancillary Services can enlarge materials. For the educationally blind student, exams/tests should be either taped or made available on computer disk (i.e., compatible to the student's braille computer). Student and Ancillary Services do not have staff available to convert copy to braille or tape. In some situations it may be appropriate to arrange to have an invigilator (e.g., teaching assistant) read the exam to the student.

- In most cases, test questions do not need to be altered in any way. However, some types of questions are more challenging than others for a student with a loss of vision (e.g., map drawing). If the exam involves substantial reading and/or writing, it may be appropriate to administer it orally (or have the exam prerecorded on tape) and allow the student to tape record his/her responses or dictate the answers to a proctor.

- Students should discuss with the instructor the nature of the required response (e.g., brailled, typed, oral/taped answers). Since the noise of the brailler or typewriter, or the sound of the student taping his/her answers may be distracting to the other students, arrangements should be made for the exam to be administered in an alternative location.

- Staff from Student and Ancillary Services are available to discuss various options for examinations that might be considered to best meet the needs of a visually impaired student and how alternative assignments could be weighted. Instructors should contact the office if there are any questions or concerns.

Special Assistance

- Loss of vision greatly influences mobility. Students who are visually impaired will need to be especially oriented to the campus. Staff from the Canadian National Institute for the Blind (CNIB) are able to assist in this area. However, every term classrooms will be changed and offices of instructors will vary. Consequently, the beginning of term is a challenge to the student with a visual impairment. Like normally seeing students, those with visual disabilities may be late for the first class. At the first session, the instructor should announce his/her name and give the title of the course and the course/section number so that the student is sure that s/he is in the correct location.

- Students can be helped if the instructor makes simple statements, such as "There is an empty seat three rows down and two seats in." Statements such as "Have a seat." are meaningless if a student does not have sufficient vision to know where the chair is located. Directions should be clear and accurate (e.g., "My office is on the fourth floor, in the east wing."). Most offices have braille numbers on the door frames. Gestures, such as pointing, should not be used alone.

- Instructors should end class on time so that students have sufficient time to move from room to room or building to building. Students should be informed in advance if the class is going to meet in an alternative location.

- Staff and students should not hesitate to offer assistance to a student with a visual impairment. If assistance is not required, the student will decline the offer. Allow the student to take an arm, at the elbow, when walking around campus or in a building. With such assistance, the student will not have to worry about obstacles in his/her path. When approaching stairs, the student should be informed if they go up or down and where the hand rail is located. When approaching a doorway, the student should be told if the door opens towards or away from the student.

- Some students with severe visual impairments may have a seeing eye dog. This animal is a working dog and not a pet, and should not be petted or fed without the owner's permission. The dog is trained to sit at the feet of his/her master, out of the way as much as possible. The presence of a seeing eye dog should not cause a disturbance in a classroom or laboratory setting.

- In an emergency, such as a fire, students who have difficulty seeing should have a designated partner to assist in the evacuation of the building. The sound of the alarm will be extremely frightening to a student who may not be able to determine whether or not the fire is nearby. Students who are visually impaired rely heavily on their hearing for mobility purposes and the noise of the alarm will impair the student's ability to use his/her hearing effectively. Such students may become easily disoriented and panic.

Local Resources

Canadian National Institute for the Blind (CNIB)
2340 Richmond Avenue
Victoria, BC V8V 4R9
595-1100

HEARING IMPAIRMENT

Individuals with a hearing impairment (i.e., decreased ability to receive the stimulus of sound) are grouped into two major categories: those who are hard of hearing and those who are deaf. Hearing acuity is measured in the best ear with maximum correction (i.e., with a hearing aid, if worn). It should be noted that many factors can contribute to an individual's ability to use his/her residual hearing. For example, a hard of hearing person may not function optimally in a room in which there is a great deal of ambient noise (e.g., hum produced by the air conditioning system or an overhead projector) or a room that has poor acoustics (e.g., a room that has a bank of windows that cause sound to reverberate). Level of fatigue may also dramatically alter a person's ability to hear. It should also be noted that many individuals with a loss of hearing may hide the fact that they have such a disability.

A. A person who is **hard of hearing** has a loss that can range from mild to severe. Individuals who are hard of hearing, however, have sufficient residual hearing to be able to process linguistic information (i.e., spoken language) through the sense of audition, with or without a hearing aid. The cause and degree of hearing loss, along with personal preference, will determine whether or not an individual uses a hearing aid. Many hard of hearing people use their ability to lipread or speechread (the preferred term) to augment their hearing. However, Walker (1986) reported that even the best speechreaders only detect approximately 25 percent of what is said through visual clues alone, and that "the rest is contextual piecing together of ideas and expected constructions" (p. 19).

An individual with a **slight hearing loss** (i.e., 25-40 dB[4]) would have difficulty hearing speech that is faint or that is far away. Generally, a person with a mild loss will not encounter any major difficulties in the learning environment. S/he may require preferential seating and good lighting to facilitate speechreading.

An individual with a **mild hearing loss** (i.e., 41-55 dB) is able to interpret speech in a face-to-face encounter with a speaker at a distance of 3-5 feet. However, unless the speech is very clear, there is a chance that certain words may be missed or distorted. Because an individual with a mild hearing loss relies greatly on speechreading, s/he may miss as much as 50 percent of class

[4] Intensity of sound is measured in **decibels** or **dBs**. A sound that is zero dBs in intensity is the softest sound that a person with normal hearing can perceive. The louder the sound, the higher the dB value. A car emits a sound that is approximately 65 dB. A person with a 65 dB loss would not be able to hear a car approaching.

discussions, particularly if the classroom is large and the speakers are not in the direct line of vision of the individual with impaired hearing.

An individual with a **moderate hearing loss** (i.e., 56-70 dB) will have difficulty with normal conversation, and will be able to understand only loud conversation. A student with a moderate hearing loss may be able to cope if s/he sits very close to the instructor and has good speechreading skills. However, s/he will have increased difficulty in group discussions.

An individual with a **severe hearing loss** (i.e., 71-90 dB) may be able to hear loud voices (i.e., shouts) from about a foot away. S/he may be able to hear loud environmental sounds (e.g., truck approaching). Group discussions are extremely difficult for a person with a severe hearing loss.

B. A person who is **deaf** (i.e., 90+ dB) does not have sufficient hearing to process linguistic information through the sense of audition even with the assistance of a hearing aid (i.e., the individual has a **profound hearing loss**)*. A person who is deaf may be able to hear some very loud sounds, but in most cases, the individual is more aware of the vibrations rather than the actual sound. The primary mode of communication for a person who is deaf is visual in nature (e.g., the individual uses some form of sign language). A few students can rely solely on speechreading to process spoken language.

Many individuals with a hearing impairment use a **hearing aid**. However, it should be remembered that such an aid does not necessarily "correct" or "cure" the loss of hearing. Rather, the aid "improves" ability to hear sound (i.e., the person may be able to hear the sound of a person's voice better, but still may not be able to understand the words clearly). Unfortunately, most hearing aids do not simply amplify speech sounds of a speaker. Other sounds (e.g., doors slamming, the lawnmower outside the classroom window) are also amplified by the aid.

One type of hearing aid, often referred to as an **FM system**, is commonly used in the classroom setting by individuals who are hearing impaired. This type of aid is designed to eliminate background noise and to amplify the sound of a speaker's voice. The speaker (e.g.,

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* The term **Deaf** (with a capital "D") is often used to designate a specific cultural group (i.e., the profoundly deaf who use American Sign Language as the primary means of communication), whereas the term "**deaf**" (with a lower case "d") is used as descriptive term to describe those who have a significant hearing loss. Many individuals use the term "deaf" when in fact they should use the term "hard of hearing".

instructor, classmate) wears a small microphone-transmitter, either around his/her neck on a cord or attached to the clothing by a clip. A direct link (through FM radio frequency) is made between the speaker's voice and the listener's ear. Since radio waves are utilized, there are no wires and the speaker is free to move around the room. The microphone can also be easily passed from speaker to speaker in a group discussion.

For an individual who is profoundly deaf, an **interpreter** may be required (i.e., to change the spoken word into a visual signal). There are two different types of interpreters: oral or manual. An **oral interpreter** "mouths" what is being said and is particularly useful for interpreting verbal signals of a person who is difficult to speechread (e.g., a person with a heavy beard or moustache, a person who hardly moves his/her lips when speaking) or for interpreting conversation that is occurring around the room and is not immediately visible to the listener. A **manual interpreter** translates the spoken word into visual sign language. Most individuals with a profound hearing loss use **American Sign Language (ASL)** or **Signed English** as their primary mode of communication.

Some students who have a significant hearing loss, particularly those individuals who lost their hearing in early childhood, also have problems in speaking. A loss of 40 dB or more may result in **speech irregularities.** However, verbal performance should not be equated with cognitive ability (Heward & Orlansky, 1988). Most adults with a hearing loss have normal intellectual capacity and scores obtained on non-verbal intelligence tests are approximately the same as those obtained by the general population. A student with a concomitant speech impairment may require special considerations in the classroom/laboratory setting. For suggestions on accommodating the student who has a communication problem, the reader is referred to the section entitled "Speech and Language Impairment".

Students who are hearing impaired often report a sense of **separateness** or **isolation** (i.e., not being a full participant in the classroom). Instructors need to ensure that a student with a hearing loss becomes an integral part of the class, participating fully in all discussions and activities. It is hoped that the following suggestions will assist in this process.

Instructional Accommodations

- Preferential seating is the most important consideration for an individual with a hearing impairment. The student should sit at the front of the class with an unobstructed view of the instructor's face. If a question is raised or a statement made by a student not in the line of view of the hearing impaired individual, the instructor

should repeat or rephrase the question/statement so that the student with the hearing loss will be able to hear the comment made. In small group seminars/classes, it may be advantageous for the chairs to be arranged in a circle so that all students will be able to see everyone clearly.

- If a student has an interpreter, it is important that the interpreter have a chair near the student. The student and the interpreter will find the best location, which should be reserved for the pair. At the first class, the student and the interpreter may be the "centre of attention" as the other students in the class may be intrigued by the use of sign language. Very quickly the students and the instructor will learn to ignore the interpreter. The instructor should ensure that s/he talks directly to the student, not to the interpreter. In group discussion, the instructor should be aware of a slight time lag required for interpretation (similar to other second language translation situations) and ensure that there is a sufficient amount of time between speakers.

- The instructor should be careful where to place herself/himself in the lecture hall. S/he should not stand in front of a bright, sunny window or a bright light as students will have difficulty seeing the speaker's face due to glare. The instructor should avoid moving around the room a great deal as this makes speechreading difficult. When writing on the chalkboard, it is important that the instructor not talk "to the board".

- The instructor should talk normally. There is no need to "over" enunciate or to talk loudly. However, if there is a tendency to talk very quickly, the student will appreciate it if the pace could be slowed down slightly. The instructor should not talk with objects (e.g., hands, lecture notes) obscuring his/her face. The use of facial gestures and body language will assist the student to interpret what is being said. To get the student's attention, the instructor should not shout, but rather signal the person visually (e.g., pointing at the student) or by touch (e.g., tapping the student on the shoulder). The student's visual attention should be obtained before starting a lecture.

- If a student does not understand a comment that has been made, one of two approaches can be used (depending on the preference of the individual or the circumstances surrounding the verbal interchange). Some students appreciate having the statement repeated verbatim so that they have a "second" opportunity to interpret what has been said. However, others may appreciate having the statement rephrased for clarification rather than repeated verbatim, particularly if the communication breakdown is a result of misunderstanding the concept(s) being discussed.

- In some cases, the language used in a particular class may be unfamiliar to the interpreter and/or the student (e.g., highly technical words, unfamiliar proper names). It is important that the interpreter and the student know in advance the material that will be covered on a certain date (e.g., chapters of a text, assigned readings). A detailed syllabus outlining the course schedule will be invaluable to the student. If there is no text, new vocabulary should be presented to the interpreter in advance (e.g., brief outline of lecture material to be covered or a list of new vocabulary) to ensure that s/he knows the correct signs/spelling.

- For the student without an interpreter, it is important to spell out or write on the chalkboard/overhead words that the student may not know. This procedure will help not only students with a hearing loss but also the other students in the class.

- Students who are hearing impaired may easily miss vital information (e.g., due date for an assignment, change of class schedule). The instructor should ensure that such information is conveyed to students in writing (e.g., in the class syllabus and/or written on the chalkboard). It is particularly important that a student with an interpreter know, prior to the date, when a class will be cancelled so that s/he will not have to hire an interpreter for that time (and pay for the time that has been wasted).

- It is difficult to speechread and to take lecture notes at the same time. Consequently, many students rely on notetakers. These individuals, often classmates, will either take notes for the student on NCR (no carbon required) paper or photocopy their notes for the student's use. Some instructors may be willing to provide students with a copy of their lecture notes/overheads. However, they are not required to do so.

- Films, slides and videos are difficult for students with impaired hearing. For students who are hard of hearing, the sound may not be sufficiently loud and the dialogue not "visible". For an individual who is deaf, watching the film/slides and the interpreter at the same time is difficult, particularly when the room is dark. When films, slides and/or videos are shown in class, there needs to be sufficient light for the student to watch the interpreter. A private showing, whereby the student can use earphones to amplify the dialogue or have an interpreter present, may be most appropriate. However, if this is not possible, providing the student with the opportunity to review the content of the presentation with the instructor (or providing a written outline or summary of the material presented in the film) will be of assistance.

- Students with a loss of hearing will benefit from material presented by means of an overhead projector. However, the hum of the machine can be very distracting, especially for those students whose hearing aid amplifies the sound. The machine should be turned off when not in use.

- Students with decreased ability to hear have to expend a great deal of energy trying to listen, speechread and/or read sign language. Consequently, they tire easily. Interpreters are also prone to fatigue. If there is a planned class break, the student and the interpreter will appreciate the break being taken at the scheduled time.

- Instructors should avoid trying to communicate with a student with a hearing impairment during class changes. The movement of chairs, the rustling of papers and the conversations of other students make communication virtually impossible. In the hallways, the noise made by people rushing to class also limits the ability to be understood.

Assignment Accommodations

- Rarely do assignments have to be altered for a student with a hearing impairment. However, some students with a significant hearing loss also have impaired speech. Consequently, oral presentations may be difficult. For a student who utilizes a sign language interpreter, it is possible for the student to give his/her presentation in sign language and have the interpreter "translate" the presentation into audible speech. In a few cases, it may be more appropriate to have a written assignment substituted for an oral presentation.

- Language laboratories that use tapes are difficult for some students with a loss of hearing. It may be necessary to have an oral interpreter verbalize the content of the tapes so that the student can speechread the material. For the student who has a profound hearing loss, tapes will have to be translated into sign language. The instructor and the student must discuss whether this would or would not be an appropriate activity and if an alternative assignment needs to be planned.

- In the laboratory setting, it may be prudent for the hearing impaired student to have a partner to ensure proper procedures are followed. Because lab instructors often move around the room giving instructions, a student with a hearing loss may miss important information. In some cases the student will have a friend in the class who would be willing to assist. If not, the instructor may ask for a volunteer. Even though the student has a partner, the

student should be able to participate fully and complete the assigned work.

Examination Accommodations

- Generally tests and examinations are not problematic to students with a hearing loss. The only exception may be oral exams. For suggestions on how to adapt oral tests, the reader is referred to the section on modification of assignments.

Special Assistance

- It is important to ensure that a student with decreased hearing acuity knows when there is a fire for s/he may not hear the alarm. The student will be able to evacuate the building on his/her own, without physical assistance. However, the instructor should ensure that the student understands directions given by persons in charge (e.g., firefighters, Security Officers).

- Some persons with a serious hearing impairment may have a specially trained dog to assist in hearing certain sounds (e.g., door bell, telephone, fire alarm). The dog, similar to a seeing eye dog, is a working animal and should not be petted or fed without the student's permission. The presence of the animal should not be a distraction in the classroom or laboratory setting.

Local Resources

Canadian Hard of Hearing Association
215 - 620 View Street
Victoria, BC V8W 1J6
384-8088

Island Deaf and Hard of Hearing Centre
(formerly Western Institute for the Deaf)
102 - 812 Wharf Street
Victoria, BC V8W 1T3
384-8088
TDD/TTY callers 384-3105

SPEECH and LANGUAGE IMPAIRMENT

Communication is a vital aspect of postsecondary education and students who are not able to make themselves understood are greatly handicapped. Individuals who have a speech and/or language impairment are often referred to as being "speaking-disabled".

The American Speech-Language-Hearing Association (1982, pp. 949-950) offers the following definitions to refer to individuals who have communicative disorders or communicative variations.

Communicative Disorders

A. A **speech disorder** is an impairment of voice, articulation of speech sounds, and/or fluency. These impairments are observed in the transmission and use of the oral symbol system.

1. A **voice disorder** is defined as the absence or abnormal production of vocal quality, pitch, loudness, resonance, and/or duration [e.g., nasality of speech].

2. An **articulation disorder** is defined as the abnormal production of speech sounds [e.g., distortion of a particular speech sound, such as "sh" sound for the "th" sound].

3. A **fluency disorder** is defined as the abnormal flow of verbal expression, characterized by impaired rate and rhythm which may be accompanied by struggle behavior [e.g., a person who stutters is said to be dysfluent].

B. A **language disorder** is the impairment or deviant development of comprehension and/or use of a spoken, written, and/or other symbol system. The disorder may involve (1) the form of language (phonologic, morphologic, and syntactic systems), (2) the content of language (semantic system), and/or (3) the function of language in communication (pragmatic system) in any combination. [For further information and suggestions on how to work with students who have a language disorder, the reader is referred to the section on Learning Disabilities.]

Communicative Variations

A. **Communicative difference/dialect** is a variation of a symbol system used by a group of individuals that reflects and is determined by shared regional, social, or cultural/ethnic factors. Variations or alterations in the use of a symbol system may be indicative of primary language interferences. A regional, social,

or cultural/ethnic variation of a symbol system should not be considered a disorder of speech or language.

B. **Augmentative communication** is a system used to supplement the communicative skills of individuals for whom speech is temporarily [e.g., as a result of a stroke] or permanently [e.g., after surgical removal of the larynx] inadequate to meet communicative needs. Both prosthetic devices [e.g., artificial voice box] and/or nonprosthetic techniques [e.g., use of a computer to produce speech] may be designed for individual use as an augmentative communication system.

The causes of speech or language disorders are varied. Some are **organic** (i.e., attributable to a specific physical cause, such as a cleft palate, absence of teeth, neurological impairment, loss of hearing), whereas others are **functional** (i.e., cannot be ascribed to a specific condition, but rather to such factors as faulty learning). Regardless of the cause, speech and language disorders carry **social penalties**. Individuals with speech disorders often "pay a heavy price in terms of rejection, exclusion, attack, overprotection, condescension ... and these penalties are sufficient to evoke frustration, anxiety, guilt and hostility in the speaker" (Van Riper, 1978, cited in Hallahan & Kauffman, 1988, p. 242). Hill, Bennett and Pistell (n.d.), in discussing the common misconception that a person with a speaking disability is either mentally handicapped or hearing impaired, stated:

> It is very insulting for speaking-disabled university students to be spoken to as if they cannot understand, or to hear themselves discussed as if they were not there. The experience has been described as being locked behind a window of one-way glass where it is possible to see out into the world, but the world cannot look in. This is isolating and frustrating. You can safely and logically assume that speaking-disabled people attending university are as intelligent and as able to understand what is being said as other students are. (p. 3)

Depending on the extent of the impairment, the needs of students will vary. More than anything, they need the support and understanding of instructors and classmates. Instructors should respond to the meaning of students' speech, rather than the way in which phrases are said (Gottwald, Foldbach & Isack, 1985, cited in Bauer & Shea, 1989). The major difficulty will be in the area of oral presentations/examinations, and in some cases a substitute form may need to be assigned (e.g., written vs. oral). The reader is referred to the sections on Hearing Impairment and Learning Disabilities for suggestions regarding substitute assignments.

When communication needs cannot be met through speech and standard augmentative techniques, such as writing, gestures and facial expressions, **special augmentative aids** and **techniques** must be used. There are more than a hundred approaches to augmentative communication (Silverman, 1989), ranging from the use of sign language, such as American Sign Language, to the use of communication boards that have words and/or pictures to which the student points or to machine-generated speech devices in which the student types in a message and the message is conveyed through synthesized speech.

The prime consideration in working with a student who uses an augmentative communication system is **acceptance**. Negative reactions to a student's attempt to use an augmentative strategy are likely to discourage his/her future use of that strategy (Silverman, 1989). It is important that the unimpaired speaker (e.g., instructor, classmate) does not dominate the interaction and control the conversation. Rather, the student needs the opportunity to participate fully in the discussion even if communication may be slow and laborious.

Instructors can enhance the communicative competence of all their students by using a **facilitative style**. Facilitative teachers allow students to control and initiate conversation topics, allow students to assume the lead in conversation, encourage students to contribute to the on-going conversation in many ways, provide frequent opportunities for student initiation and control of social interaction, and respond to student-initiated social/communicative behavior (Bauer & Shea, 1989).

The following suggestions for communicating with a student who has a speech and language impairment are adapted from the pamphlet entitled "You and the Speaking-Disabled University Student: Communication Tips" by Hill, Bennett and Pistell (n.d).

<u>One-to-One Communication</u>

- In conventional communication, people are used to being able to understand without much effort. It is easy to become embarrassed, frustrated and impatient when communication is not easy. Discomfort can interfere with the listening skills required by the listener and the speaking skills needed by the speaker. Such discomfort can lead to tension for both individuals. A person with a speaking disability knows that s/he is difficult to understand and does not expect that individuals will understand everything said. The instructor should try to be as relaxed as possible and should attempt to get the "gist" of what is being said. The listener should avoid trying to anticipate or guess what a student is trying to say beyond more than one or two words. An incorrect prediction will

result in a communication block, making it harder for both parties to continue.

- Extra time will need to be set aside for communicating with a student who has a speaking disability. While most people talk at the rate of approximately 170 words per minute, conversing with a student with a speaking disability is much slower. As the instructor gets used to the speaker's individual style of communication, conversations will speed up considerably but they will still continue to be slow.

- Understanding will be enhanced in settings that have few distractions so that full attention can be paid to what is being said. If a meeting is to be held in the instructor's office, it will be beneficial to have any background music turned off and to have all telephone calls held so that there will be no distractions. In more informal situations, settings such as a quiet coffee shop where there is little background noise may be suitable. If the student is seated (e.g., in a wheelchair), the instructor should sit or kneel down so that eye contact is established with the speaker.

- If a student is using some type of communication device, such as a communication board, s/he may need assistance in setting up the equipment (e.g., unfolding and appropriately placing the board). If this type of assistance is needed, the person with a speaking disability is responsible for providing clear, easily accessible instructions to follow.

- The instructor should attend to all forms of communication. It is easy to be looking so closely at a communication board or listening so carefully to an individual's speech that other aspects of communication are missed. In particular, the instructor should pay attention to body language and facial expression.

- It is important that the instructor inform the student when s/he does not understand something being said. If the instructor attempts to "fake" understanding, embarrassment will result for both the listener and the speaker and the conversation will either stay at a superficial level or be terminated as quickly as possible. The instructor should avoid saying such things as "I'm having a bad day" or "Sorry, I'm so dumb". Rather the listener should simply tell the speaker that s/he did not understand so that the breakdown in communication can be repaired as quickly as possible. It is a good idea to repeat back the parts that <u>were</u> understood, so that the speaker does not have to give the entire message again.

- In cases of communication breakdown, it may be beneficial to ask the speaker to spell out the key words that were missed letter by

letter. The instructor may be able to assist by "predicting" after a few letters have been spelled. The instructor could assist by saying "Do you mean ... ?". If that is what was meant, the speaker can then stop spelling. If that is not what was meant, s/he can continue to spell out the word or words.

- It is also helpful to find out or to confirm what the topic of conversation is. Communication breakdown generally occurs when the speaker changes subjects or introduces new, unexpected information. If this happens, the instructor could ask the speaker to spell out the new topic or to ascertain the topic by asking several "yes-no" questions, one at a time. As in "Twenty Questions", the listener should start with general questions and progress to more specific ones.

- People with speaking disabilities often make use of **oral interpreters** during formal situations, such as interviews with professors or oral examinations. The use of interpreters may also be necessary in other important meetings, during phone conversations, or if time is limited. The instructor may find it helpful if an interpreter is present for the first few meetings with a speaking-disabled student, so that s/he can gain listening experience in a more relaxed atmosphere.

- Many people with speaking difficulties carry prepared information to help them communicate with others more effectively. A student may have instructions typed on cards so that s/he can easily ask classmates to turn on a tape-recorder, make routine telephone calls or help remove his/her coat. If the instructor wishes to meet individually with a student, it may be appropriate to ask the student to prepare notes in advance so that the discussion will go more quickly.

- In communicating with a student who has a speaking disability, it is important to remember that in most cases the student does not have difficulty in comprehending what is being said. The instructor should avoid trying to improve communication by talking more slowly, more loudly, or more simply. Such adjustments are not necessary and, in fact, will interfere with the flow of conversation.

- A student with a speaking disability will take longer to begin to answer a question than a non-disabled person. This will result in long gaps between questions and responses. The instructor should not make the mistake of filling in these gaps by expanding on the first question or by asking other completely different questions. Such behavior will lead to confusion, because the student now has to respond to several questions at once and, when the student starts to respond, the instructor will not know which question is

actually being answered. Rather, the instructor should try to become used to the slower conversational pace and to give the student plenty of time to respond to questions.

- Rather than doing all of the talking, instructors and classmates should try to give the student with a speaking disability as much opportunity as possible to contribute to conversations.

Group Communication in Academic Settings

- Students who are speaking-disabled are very aware that communicating in settings such as meetings and classes takes up the time of everyone in the group. Because of this, they may not participate at all when in group situations. Sometimes students will rely on other members of the group (i.e., classmates) who are experienced listeners to interpret. In this approach the student who is speaking-disabled makes a comment or asks a question while another student who understands best translates what is being said for the benefit of the rest of the group. If the student limits him/herself to one or two remarks per group meeting, the time cost is very small. Students who have tried this strategy report that it breaks a barrier between themselves and the other course participants and that their personal course satisfaction improves. This strategy requires the encouragement and support of the group leader or instructor to be implemented successfully.

- The instructor should volunteer to spend some extra time before or after meetings and classes to listen to any comments or questions the student has. This way the instructor can relay them to the rest of the group when it is appropriate.

- The student might want to spend time on his/her own preparing questions or comments that s/he would have liked to have asked during the last meeting. The instructor might offer to read these out so that they can be answered at the beginning of the next class meeting. Oral presentations can also be made by having a classmate read out material that has been previously prepared. The instructor could facilitate this method by asking for volunteers to be readers (i.e., if the student does not have an interpreter present) or by volunteering to do the reading for the student.

Group Communication in Social Settings

- Speaking socially is usually much less of a strain for a student with a speaking disability than speaking in academic groups because the time factor is not as important. Also it is easier to have side-conversations with one or two people at a time. However, social situations have their own hazards, which are surprisingly hard to avoid.

The most common problem is having non-disabled speakers talking in front of students with speech and language disorders as if they were not there. Such behavior is insulting. Similarly, instructors should ensure that they do not discuss students as if they were not present.

- It is important to avoid answering for or making choices for the student with a speaking disability, unless you have his/her specific permission.

- Group conversations flow swiftly, with many rapid subject changes. Consequently, the person with a speech and language impairment may have difficulty joining in at the appropriate time. Instructors should be alert to a person getting ready to make a comment and help by interpreting for him/her, if appropriate.

Instructional/Assignment/Examination Accommodations

- Many students who are speaking-disabled have other physical disabilities that slow down communication through reading and writing as well as talking. Difficulties with getting access to books in the library, turning pages, and coordinating the eyes can make reading a slow task. Limited dexterity can slow down writing or typing, making preparing essay assignments or taking written examinations extremely time consuming. For example, some students type at the rate of one or two words per minute. Many of the suggestions offered in other sections of this handbook (e.g., allowing extra time for assignments) may be of assistance.

Interpreting

- In some situations, such as oral examinations, class presentations or meetings, the student with a speech or language impairment may bring an interpreter to help communication flow more smoothly and quickly. Unlike foreign language interpreting or interpreting for people who are deaf, interpreting for individuals who are speaking-disabled is not an organized profession. Instead interpreters are usually experienced listeners such as family members, friends and attendants (i.e., paid employees). Even so, interpreters should be treated like professionals and should act accordingly.

- The interpreter's function is to listen to the speaker (who will be using speech and/or augmentative communication methods) and translate what s/he has to say into speech that listeners can understand more easily. To speed up communication, some of the listening may have been done in advance and the interpreter may provide information that was prepared prior to the meeting. However, the

interpreter should not be expected to add information or expand on the speaker's responses unless the speaker has specifically given the interpreter permission to do that.

- The interpreter is present to help communication. Instructors should ensure that they focus their attention on the student, not the interpreter, and that they talk directly to the student, using first person pronouns (i.e., "you" rather than "she" or "he"). Instructors should ensure they talk <u>with</u> rather than <u>about</u> the individual with a speaking disability.

- Over time, as an instructor gains experience as a listener, s/he may, on occasion, be asked to interpret for a student. In such situations it is important that the instructor understands his/her role (i.e., as an impartial translator). It is important to interpret accurately, to avoid interjecting a specific viewpoint, to stay in the background, to give only as much interpreting support as necessary and to keep all information confidential.

LEARNING DISABILITY

It is widely recognized that the population of students with learning disabilities in postsecondary settings continues to increase dramatically. In a national survey conducted by the American Council on Education in 1987, students with learning disabilities constituted 1.2 percent of all full-time, first-time-entering college freshmen and 18 percent of the postsecondary population of students with disabilities (Hirschorn, 1988). Data from several studies indicate that the number of students who have learning disabilities attending postsecondary programs is second only to the number of students who have a physical impairment (Hill, in press; Marion & Iovacchini, 1983; Sergent, Sedlacek, Carter & Scales, 1987).

The Association for Children and Adults with Learning Disabilities (ACLD) defines learning disabilities as follows:

> **Specific learning disabilities** is a chronic condition of presumed neurological origin which selectively interferes with the development, integration, and/or demonstration of verbal and/or nonverbal abilities. Specific learning disabilities exist as a distinct handicapping condition in the presence of average to superior intelligence, adequate sensory and motor systems, and adequate learning opportunities. The condition varies in its manifestations and in degree of severity. Throughout life the condition can affect self-esteem, education, vocation, socialization and/or daily living activities (ACLD, 1985, p. 2).

There appears to be various forms of learning disabilities. Some students have difficulty reading printed material (commonly known as **dyslexia**) and benefit from having reading material in a recorded form; others have difficulty in producing written material (**dysgraphia**) particularly in examination situations when writing under strict time constraints; others have difficulty in the area of mathematics (**dyscalculia**) and rely heavily on calculators for performing mathematical algorithms. Some students have difficulty in only one area; others have problems in more than one. Many students with a learning disability have difficulty in sequential memory tasks and in organization (e.g., time management, study skills).

It should be noted that many students who have difficulty reading, writing, spelling or performing mathematical calculations do <u>not</u> have a specific learning disability. Students who need specific accommodations as a result of a learning disability are required to present a current assessment report indicating the nature of the problem to staff at Student and Ancillary Services. If an instructor questions the student's right to certain concessions, s/he should contact the

Coordinator of Special Student Programs. Instructors should not simply accept a student's self-diagnosis. For students who believe they have a learning disability but have never had a complete assessment, staff at Student and Ancillary Services can arrange to have an evaluation conducted by the Learning Disabilities Association.

According to McGuire and O'Donnell (1989), common characteristics of college-level students who have learning disabilities include:

Strengths	**Weaknesses**
- Oral expression and participation in class	- Written expression
- Hands-on, experiential learning	- Spelling and vocabulary
- Persistence	- Poor word attack skills
- Sensitivity to peers with problems	- Organization and time management
- Creativity	- Problem solving
- Motivation to achieve	- Distractibility
- Personal responsibility	- Memory and retrieval of specific information
	- Understanding abstract concepts
	- Poor computation skills
	- Overgeneralizing
	- Low self-concept
	- Low frustration tolerance
	- Social-perception problems

In many cases faculty members have limited knowledge about learning disabilities (Aksamit, Morris & Leuenberger, 1987) and may have misconceptions about this particular area (McGuire & O'Donnell, 1989). Faculty members often react negatively to students with learning disabilities (Minner & Prater, 1984), often falsely believing that they are mentally handicapped or emotionally disturbed. Instructors may not recognize the need for accommodation because of the lack of "visibility" of the disorder (Aksamit et al., 1987). Similar to a loss of hearing, a learning disability is often referred to as a "hidden handicap". In the case of a student who is learning disabled and gifted, faculty members may not recognize the increased intellectual ability of the student, focusing rather on the student's weaknesses. Some faculty may question the "fairness" of modifying the program for a student who does not have an obvious physical disability. Others feel that their role in instruction is "to teach content and not to cure learning problems" (Kahn, 1980, p. 40).

Barbaro (1982), in discussing the considerations needed by faculty in accommodating the learning disabled student, made the following comments:

> The pinnacle of formal education pursuits is the college experience. Expecting students with learning disabilities to compete in this arena is like asking a wheelchair student to "run" a marathon. The LD [learning disabled] student can learn compensation skills and the wheelchair can be motorized enabling both to keep up with the competition, but every step forward only emphasizes their differences from the general student body. Even if successful, the experience will be painful. Failure in yet another educational institution can be devastating. To encourage someone to embark on a college career that will end in failure is not a friendly or loving act. On the other hand, to prematurely discourage the quest can prevent the student from maximizing his or her potential. (p. 600-601)

With appropriate accommodations, many students with learning disabilities are able to succeed at the postsecondary level. Accommodating to the student does not, and should not, imply a lowering of standards. However, as stated by Jastram (1979): "there will probably be no more persistent or difficult problem for faculty members than this question of how far it is reasonable or appropriate to go in waiving specific requirements or modifying significant skill-development exercises in order to accommodate the limitations of a particular handicapped [LD] student" (p. 19). In a recent study by Nelson, Dodd and Smith (1990), it was found that there were certain accommodations that faculty are less willing to provide to students than others. For example, 98.66 percent of faculty members were willing to allow a student to tape record lectures, whereas only 32.56 percent of the faculty were willing to have a student complete an extra credit assignment when this option was not available to other students.

Depending on the strengths or weaknesses of the student, the types of accommodation will vary. For students who have difficulty in reading, some of the accommodations that have been suggested for students who have a loss of visual acuity may be appropriate (e.g., tape recorded readings and lectures). The instructor should refer to the section on Visual Impairment. Similarly, for students who have difficulty in processing linguistic information, some of the accommodations that have been suggested for students who have a loss of hearing may be appropriate (e.g., use of visual materials, preferred seating). The instructor should refer to the section on Hearing Impairment. For the student who has a speaking disability, the instructor should refer to the section on Speech and Language Impairment.

Recently, there has been a plethora of articles related to the needs of the postsecondary student with a learning disability. The following suggestions were adapted from Barbaro (1982), Cowen (1988), Kahn,

1980), Minner and Prater (1984), McGuire and O'Donnell (1989), Nelson, Dodd and Smith (1990), Runyan (1991), Scott (1990) and Vogel (1982). For further information, the reader is referred to these sources.

Instructional Accommodations

- Many students with learning disabilities have difficulty organizing and managing their time. Instructors can assist by providing the student with a detailed syllabus (e.g., outlining course content, schedule of topics to be covered, due dates for assignments) so that s/he can plan accordingly. In designing the format for the syllabus, the instructor should ensure that the key elements are highlighted (e.g., by using a variety of letter size, underlining, spacing) and that the outline is organized and material is easily found. At the first class meeting, the instructor should review the syllabus orally and answer questions that students might have in order to ensure complete understanding of course expectations.

- Many students who are learning disabled are slow readers. Some prefer to have their reading material on tape. Instructors can assist by providing a reading assignment list prior to the start of the term so that the student can have sufficient time to make proper arrangements. Instructors can also assist in determining whether or not a complete reading, as opposed to certain portions, needs to be taped.

- Notetaking may be problematic for some students (i.e., due to memory deficits, slow information processing, distractibility, poor handwriting and/or spelling, or spatial organization problems). Some students may request permission to tape-record the lectures; others may use notetakers. Providing lecture outlines assists the student in determining the key elements of the material covered, and frees the student to listen rather than having to simultaneously listen, comprehend, synthesize and/or extract the main idea, retain the information, formulate a synopsis, and finally write it down (Vogel, 1982). Handouts also eliminate the student's need to spell new vocabulary and/or proper names. Many students who are learning disabled receive additional tutorial assistance, and lecture outlines help the tutor review the material covered. Some faculty may be willing to provide the student with a copy of their lecture notes.

- The use of overhead transparencies and board notes may also be problematic as the student needs to read, copy and listen to the instructor simultaneously. Copies, in the form of handouts, will facilitate learning. If overhead transparencies are used or material is presented on the chalkboard, it is helpful if the material is

clearly written and well spaced so that the student is able to decipher it easily. Reading the material aloud assists the student who is tape recording the lecture.

- The instructor's style of lecturing can impact on the student's ability to comprehend the material. The material should be organized sequentially and presented in a manner that can be heard clearly and at a rate that can be followed. The use of simple vocabulary, concrete examples and personal anecdotes will increase the student's ability to recall information at a later date. The instructor should allow an adequate amount of time for the student to locate material before discussion (e.g., the instructor should wait until the student has found the correct page/diagram/chart in the text) and sufficient time for notetaking.

- The instructor should periodically review key concepts to ensure that they have been understood. For studying purposes, giving the student a cue that certain material is particularly important (e.g., "The main points are ...", "This might be on the test...") is beneficial. Teaching students mnemonic strategies will assist in memorization. The instructor should supplement the lecture material with references to the textbook pages, if appropriate (e.g., "This point is covered on page 87").

- The instructor should provide ample opportunities for the students to ask questions. Nonverbal signs, such as frowning, may indicate that a student has not understood the point(s) made during the lecture.

- Many students who are learning disabled are easily distracted. An instructor who walks around the room a lot or who wears clothing that is highly patterned or shiny jewelry may be turning a student's attention away from the lesson. A room with a lot of distractions (e.g., flickering lights, loud ticking clocks) is not ideal. It may help all the students if the hall door is closed and the window curtains are drawn, prior to the start of the lecture.

- Most students with a learning disability will prefer to sit close to the instructor so that there are fewer distractions. Some students rely on lip or speech reading to fully understand material presented orally.

Assignment Accommodations

- As in the case of students with a visual or hearing impairment, a student with a learning disability may require extra allowances in terms of assignments (e.g., extended deadlines for completion, alternative assignments such as oral presentations or tape-recorded

presentations rather than written assignments). The student should discuss possible problems with assignments at the beginning of the course, rather than just before the assignment is due. Requirements of an assignment should be given by the instructor both orally and in writing to ensure that the student is clear as to what is expected.

- Many students who have particular difficulty in written expression employ proofreaders (e.g., to correct faulty grammar and punctuation, to substitute higher level vocabulary), in the same manner that a non-disabled student might hire a typist to type an essay. Instructors should understand that the proofreader is simply assisting the student to produce a more satisfactory copy and not completing the assignment for the student. In most cases, such assistance should not be a factor in assigning a grade. The exception might be in a course, such as creative writing, in which a grade is determined by the degree of writing skill, as opposed to the factual content of the material presented. Instructors are advised to contact staff in Student and Ancillary Services to discuss any concerns they may have regarding the use of proofreaders.

Examination Accommodations

- As in the case of a student with a visual impairment, allowing extended time or untimed tests to accommodate for decreased reading speed should be allowed. Instructors may feel that this accommodation may be unfair to the non-disabled student. However, research has shown that extra time will improve the results of students with a learning disability, whereas normally achieving students do not perform significantly better with extra time[5]. In the case of extended time or untimed examinations and tests, the student should take the exam in a separate room with a proctor. Staff at Student and Ancillary Services can help with the arrangements. In some cases allowing an oral rather than a written exam, having a student dictate answers rather than write them, or having a proctor read the questions prior to answering them, may be possible options.

- The instructor can also accommodate the student with a learning disability in the construction of the test items in a written examination. For example, an essay exam could be substituted for an objective test (e.g., multiple choice test) that requires a great deal of reading. If an alternative form of the test will be required, the

[5] For a discussion of the effects of extra time on the ability of university students, the reader is referred to the article by Runyan (1991) entitled "The Effect of Extra Time on Reading Comprehension Scores for University Students with and without Learning Disabilities", Journal of Learning Disabilities, 24, 104-108.

instructor must determine how the grades from the alternative test will be equated with traditional standards (e.g., equal weighting vs. unequal weighting).

- Questions can be phrased in a manner similar to the style used in class so as to help the student retrieve information. For example, if a lecture covered material that was stated in a positive way (e.g., "The following three factors contribute to ....."), the exam question could also be stated in a positive rather than a negative way (e.g., "What three factors contributed to .....?" rather than "What three factors did not contribute to ....?"). It is helpful to the student if the examiner avoids using double negatives, unduly complex sentence structure, and questions embedded within a question in composing test questions (Vogel, 1982). Students should be allowed to clarify questions verbally with an instructor to ensure that they have full comprehension before answering a question.

- Computer-scored answer sheets may be difficult for a student with poor eye-hand coordination. In such cases the student would benefit from being allowed to write the answers on a separate sheet of paper and having the items hand-scored. Some students are able to cope with computer-scored answer sheets if the sheets are enlarged (e.g., 11x17 inches). Most Departmental offices have photocopiers than can produce such enlargements.

- Some students with poor handwriting use a word processor (with a built-in program to check spelling) in taking notes and completing assignments. Writing requires automaticity and speed in letter formation, and the material written must be sufficiently legible and properly spelt to be decipherable at a later date (Vogel, 1982). The instructor and the student must discuss the acceptability of using such equipment/software in tests, examinations and/or other in-class written assignments. If a student is not allowed to use such equipment, s/he should not be unduly penalized for poor spelling or illegible handwriting. Similarly, students having difficulty in mathematical computation may wish to use a calculator during classwork. Students and instructors must discuss whether or not the use of calculators (and any other form of reference materials, such as multiplication tables) will be acceptable. If such materials are not allowed, the instructor should analyze both the process (e.g., whether or not the correct algorithms were used) and the product (e.g., the answer) in determining the overall grade.

- Frequent examinations or tests, rather than a major test at the end of a term, may be helpful for the student with a learning disability.

Special Assistance

- The types of difficulties students with learning disabilities may encounter vary, depending on the strengths and weaknesses of an individual student. Students are encouraged, by staff at Student and Ancillary Services, to set up a meeting with the instructor prior to the start of the course. However, it should be remembered that not all students are in contact with Student Services, nor do all students heed the advice given. In the meeting the instructor should discuss such topics as reading load, course requirements, frequency and method of evaluation, possible modifications to method of instruction and/or evaluation and the schedule of assignments. Such a meeting will allow the instructor to get a first-hand impression of the seriousness, motivational level, and commitment to learning that the student has made to the particular course (Vogel, 1982).

- Instructors can assist the student with a learning disability in course selection (i.e., matching student's learning strengths and weaknesses, processing deficits, and learning style to course requirements). For example, a student whose major difficulty is in reading comprehension and rate might be advised to take only one heavy reading course per semester. In some cases, it may be recommended that a student does not take a full load of courses in order to allow for additional tutorial time. For some students classes that meet three to four times per week, as opposed to those than meet once a week for an extended period, may be more appropriate.

- Reasonable modifications of academic requirements, at the program level, suggested by Vogel (1982) and Cowen (1988) include: (a) extending time allowed to complete a program, (b) substituting one course for another required course, (c) modifying or waiving foreign language requirements, (d) allowing for part-time rather than full-time study, and (e) allowing a student to audit the course before actually enroling in the course (i.e., at reduced or no cost). However, when considering modifications to academic requirements, Scott (1990) stressed the importance of examining each case individually rather than establishing firm guidelines.

Local Resources

Learning Disabilities Association
941 Kings Road
Victoria, BC V8T 1W7
386-9511

PHYSICAL IMPAIRMENT

Students with physical impairments form a heterogeneous population with symptomology that ranges from mild to severe. The presence of a physical impairment often results in an inability of the person to move freely. The terms **mobility** or **agility impaired** and **physically challenged** are often used to describe students with physical impairments whereas, persons without a mobility impairment are often referred to as "able-bodied". Some students with physical impairments may require a wheelchair to travel; others may require the use of a cane or crutches. Some students are able to travel freely, but have difficulty in the use of their upper extremities (e.g., burns to the hands causing contractures of the skin and muscle that make writing difficult).

There are two types of physical impairments:

A. A person who has an **orthopedic impairment** has a deformity of the skeletal system (i.e., bones, joints, limbs and associated muscles and ligaments). The impairment can be the result of a congenital anomaly (e.g., clubfoot, spina bifida), the result of disease (e.g., muscular dystrophy, arthritis), or the result of trauma or accident (e.g., amputation).

B. A person who has a **neurological impairment** has some type of involvement of the nervous system that affects the ability to move, use, feel or control certain parts of the body. Neurological impairments can be the result of a congenital anomaly (e.g., cerebral palsy), the result of disease (e.g., poliomyelitis), or the result of accident (e.g., spinal cord injury, head trauma). Individuals who have repeated seizures (as a result of abnormal electrical activity in the brain) have a condition known as epilepsy.

Regardless of the cause of an orthopedic or neurological impairment, the impact of the condition is generally defined in terms of the parts of the body that are affected. The most common types of limb involvement include:

Quadriplegia	All four limbs (i.e., arms and legs) affected. Movement of the trunk and face may be impaired.
Paraplegia	Impairment of the legs only. Body from waist up is not affected.
Hemiplegia	One-half of the body affected (i.e., right or left side).

The major need for the student with a physical impairment is in the area of **environmental modification**. Over the past decade or more, there has been a major emphasis on making public buildings, including those at the University of Victoria, barrier-free. To accommodate the student with a physical impairment, older buildings are being renovated and newer buildings are being constructed to be accessible. Modifications have included the provision of ramps, automatic doors, adapted washrooms, lowered telephones and drinking fountains within the buildings and designated parking facilities and curb cuts outside the buildings.

New technological advances have also assisted in allowing a student with a physical handicap to pursue a program of study. **Prosthetic devices** (i.e., an artificial replacement for a missing body part, such as an artificial hand or leg), **orthotic devices** (i.e., a device that replaces a function no longer present in a part of a person's body, such as a hand brace allowing a person to hold onto a pencil or pen) and other **adaptive devices for daily living** (e.g., specialized computers that allow a person to use the telephone or to turn on and off lights) have radically altered the life of a student with a physical impairment. Many pieces of equipment found in the university environment can be easily modified to accommodate a student with a physical impairment (e.g., a longer handle to allow a student to play tennis in a wheelchair; a lowered work space to accommodate a student during laboratory experiments).

Even though a physical impairment is usually **chronic** in nature, in many cases, an individual may have **acute** episodes of difficulty. For example, the development of pressure sores or decubitus ulcers that result from prolonged periods of sitting in a wheelchair may require a student to be confined to bed, temporarily, in order to alleviate the condition. Similarly, a student with severe allergies may be susceptible to developing colds that prevent him/her from attending classes, particularly during the winter months. Such episodes may severely restrict the freedom of the individual forcing the student to miss several days or weeks or in some extreme cases to withdraw from his/her course of study. While a student is away, the instructor could ask for a volunteer to photocopy his/her notes or audiotape/videotape the lesson.

Instructional Accommodations

- In most cases, the method of instruction does not have to be modified for a student with a physical impairment. However, it is important to ensure that the building in which instruction is to occur is accessible, as is the classroom and the equipment within the classroom. In some cases this may require a change of room

location. Due to possible mechanical breakdown of elevators, it is preferable to schedule classes for students with physical impairments, if possible, on a main floor.

- Suitable space must be provided for the student in a wheelchair (i.e., ample floor space with clear pathways; tables and learning centres at the correct height). Equipment should be located in an accessible location. Desks may need to be cleared to make a path for a student, and usually classmates will volunteer to assist if asked. The student should be situated in a location that allows him/her to see the instructor, chalkboard, or screen during the lecture and/or demonstrations. All materials should be stored in close proximity to the student's work space to avoid him/her having to make many trips around the classroom/laboratory.

- For students using canes or crutches, pathways must be sufficiently wide and floor space cleared of books and bookbags. Floors should be dry and have a non-slippery surface.

- Students with physical impairments need to have periodic rest breaks (e.g., to go to the restroom, to take medication, to eat). Any class longer than an hour and a half in duration should have a scheduled break.

- A student may need someone to assist him/her in certain tasks (e.g., remove a coat, store papers or place texts in backpack after class, turn pages in a text, take notes). The instructor may assist by approaching a classmate to volunteer, particularly if the student with a physical impairment does not know any of his/her classmates. In some cases, a personal attendant will accompany a student to class to assist him/her.

- The instructor should talk naturally to a student with a physical impairment. Phrases such as "I'll be running along now." or "How about walking over to the cafeteria?" are acceptable and are part of the speech of a student with a motoric disability.

Assignment Accommodations

- In many cases, there will be no need to modify assignments unless the student's lack of mobility prevents completion (e.g., participation in a field trip). In such cases, the student and the instructor should meet to discuss an alternative assignment and to discuss how the assignment will be graded and/or weighted.

- In many cases a student with a mobility problem will be able to participate in field trips or outings. However, the student must be notified well in advance to be able to make appropriate travel

arrangements if specialized transportation (i.e., wheelchair van) is required. The instructor will need to think about possible physical barriers that the student might encounter to determine whether or not the trip is appropriate. The instructor should not rely on the student to determine the problems that might be encountered, as s/he may never have been to the site before, and may not know what to anticipate. For a student who tires easily, frequent rest breaks may need to be scheduled during the activity.

- In some classes it may be appropriate for a student to be paired with an able-bodied student (e.g., in the laboratory). Even though the student with a physical impairment may not be able to participate motorically (e.g., pour chemicals into a beaker), the student will be able to participate in other ways (e.g., recording the reactions noted).

- Students with motoric impairments may have difficulty completing certain assignments on time. If a student has to rely on an able-bodied helper to assist in obtaining materials in the library or typing an assignment, the student should be given additional time (i.e., extended deadlines), if requested.

- While university librarians are very helpful, both classmates and instructors can also offer assistance in conducting library research. If classmates are informed as to the student's research topics, they can provide help informally by passing on any relevant materials that they come across while doing their own library research. Instructors might help the student save time by lending him/her appropriate materials from their personal libraries (Hill, Bennett, & Pistell, n.d.).

- Some students with a physical disability also have a speech impediment. For oral presentations, an alternative assignment may need to be considered. For additional suggestions regarding accommodating a student who has a speaking disability, the reader is referred to the section on Speech and Language Impairment.

Examination Accommodations

- Often the only modification required for a student with a physical disability is extra time to complete the test (i.e., if the student is particularly slow in writing). Students who are unable to write should be allowed to dictate answers into a tape recorder or respond to a proctor who can transcribe the answers into print. Obtaining a proctor can be arranged through Student and Ancillary Services if necessary.

Special Assistance

- Students who have mobility problems should be alert to scheduling difficulties. They should allow sufficient time to get to and from class on time. In some cases, locations of classes can be changed to accommodate a particular student, but at times this may be impossible.

- In talking to a student who is in a wheelchair, it is polite to try to position oneself at eye level (i.e., by squatting, kneeling or sitting down), particularly if the conversation will be lengthy. The able-bodied person should never lean on the wheelchair.

- The instructor and/or classmates should not hesitate to offer assistance (e.g., pushing a wheelchair, opening a door). If the student does not need help, s/he will let you know by politely refusing the offer.

- In assisting an individual who uses a wheelchair, it is important to ensure that the person is properly balanced:

  * In **going down a steep hill**, the attendant should not push the chair, but rather go backwards down the hill with the chair following. The attendant's body mass will prevent the chair from rolling too quickly.

  * In **going down a single step or curb** (i.e., if there is no ramp or curb cut), the attendant should turn the chair around so that the chair moves backwards. The attendant should step down off the curb and pull the chair back slowly without lifting. The back wheels should be moved over the the edge slowly to avoid a sudden bump.

  * In **going up a single step or curb** (i.e., if there is no ramp or curb cut), the attendant should tilt the chair backwards with the chair facing the step. The attendant should move forward allowing the front wheels to touch the surface and then slowly ease the chair forward, lifting gently up on the handlebars, until the back wheels reach the step. This procedure is difficult, particularly if the individual is very heavy. It is better to try and find an alternative way around the barrier.

  * To assist a person **entering a car**, the wheelchair, with the brakes applied, should be positioned between the body of the car and the open door. In many cases the individual will be able to use the car door and edge of the car roof to raise his/her body to a standing position. However, the attendant should brace her/himself against the door to ensure that it does not swing

towards the person in the wheelchair. If the individual cannot stand independently, s/he can be assisted, after the arm of the wheelchair next to the car seat is removed, to slide off the chair onto the car seat. A non-electric chair can be collapsed for storage in the trunk by lifting up the pedals and the seat upholstery. Electric chairs cannot be easily collapsed. For a person who has extreme difficulty getting in and out of a car, a specially adapted wheelchair lift van, in which the individual and the chair can be strapped into place, may be required.

- In case of an emergency (e.g., a malfunctioning elevator), the Office of Traffic and Security should be contacted to assist in transporting a student in a wheelchair down a set of stairs. The staff have specially designed equipment suitable for the procedure. If a person in a regular (i.e., non-motorized) wheelchair must be carried down a set of stairs, at least two people are needed. Because of the weight of an electric wheelchair, usually four people are required. Since the arms of a wheelchair are often detachable, it is best to lift by the frame, not by the arm rests.

- In the event of a fire, the elevator should not be used. The student should be taken to the stairwell, balcony or rooftop where firefighters can assist in evacuation.

Local Resources

B.C. Paraplegic Association
813 Darwin Street
Victoria, BC V8X 2X7
384-3353

The Arthritis Society
2680 Richmond Road
Victoria, BC V8R 4S9
598-2277

Vancouver Island Head Injury Society
220-620 View Street
Victoria, BC V8W 1J6
383-5262

Handicapped Action Committee
20-911 Yates Street
Victoria, BC V8V 4X3
383-4105

Multiple Sclerosis Society of Vancouver Island
1004 North Park Street
Victoria, BC V8T 1C6
388-6496

Handicapped Resource Line
1-800-742-1820

The Student with Epilepsy[6]

Epilepsy refers to a condition in which seizures occur chronically and repeatedly. **Seizures** are sudden, brief, temporary states of abnormal brain functioning due to uncontrolled electrical discharges in the brain. For many adults epileptic seizures may be largely or wholly controlled by anticonvulsant medications.

The specific causes of epilepsy are not clearly known. A wide variety of psychological, physical and sensory factors are thought to trigger seizures in susceptible persons (e.g., fatigue, excitement, anger, surprise, hyperventilation, hormonal changes [during menstruation or pregnancy], withdrawal from drugs or alcohol, and/or exposure to certain patterns of light, sound, or touch).

Epilepsy itself constitutes a disorder **only** while a seizure is actually in progress. Most children and adults with epilepsy lead full and normal lives. Most have normal intelligence and need not be considered disabled or handicapped.

When working with students with epilepsy, instructors should project a positive attitude and avoid becoming a "terrified observer." The following information regarding the two major types of seizures and care of the individual who has had a seizure will assist in understanding how to deal with the situation.

A. **Generalized Tonic-Clonic Seizure** (or Grand Mal Seizure)

1. Signs

Sudden cry, fall to ground, rigidity, followed by muscle jerks, frothy saliva on lips, shallow breathing or temporarily suspended breathing, bluish skin, possible loss of bladder or bowel control, usually lasting two to five minutes.

Normal breathing then starts again.

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[6] Adapted from Bauer and Shea (1989) and Heward and Orlansky (1988).

There may be some confusion and/or fatigue. Some students actually fall asleep for long periods. This state is followed by return to full consciousness.

2. Often Mistaken for

Heart Attack
Stroke
Unknown but life-threatening emergency

3. Actions by Instructor

Look for medical identification (i.e., ID bracelet).
Keep calm. Let the seizure take its course.
Protect from nearby hazards (e.g., sharp table edges).
Ease student to floor, if possible.
Loosen tie or collar.
Place folded jacket under head.
Turn on side to keep airway clear.
Reassure when consciousness occurs.

If single seizure lasted less than ten minutes, ask student if hospital evaluation is wanted.

If multiple seizures or one seizure of more than ten minutes, call for paramedics (i.e., **PHONE 911**).

4. Inappropriate Responses

Do not restrain.
Do not attempt to "stop" the seizure. Do not attempt to revive the student.
Do not put any hard implements in mouth.
Do not try to hold tongue. It cannot be swallowed.
Do not try to give liquid during or after seizure.
Do not use oxygen unless there are symptoms of heart attack.
Do not use artificial respiration unless breathing is absent after muscle jerks subside, or unless water or vomitus has been inhaled.

B. **Non-Convulsive Absence Seizure** (or Petit Mal Seizure)

1. Signs

A blank stare, lasting only a few seconds.

May be accompanied by rapid blinking, and/or some chewing movements of the mouth.

The student may drop whatever s/he is holding.

Person having the seizure is unaware of what is going on during the seizure but quickly returns to full awareness once it has stopped.

2. Often Mistaken for

Daydreaming
Lack of attention
Deliberate ignoring of instructions

3. Actions of Instructor

No first aid necessary, but medical evaluation should be recommended.

Local Resources

Epilepsy and Parkinson's Centre
1740 Richmond Avenue
Victoria, BC V8R 4P8
370-2211

CHRONIC HEALTH PROBLEMS

Students with **chronic health problems**, like students with physical impairments, form a heterogeneous group. The disability may be mild, moderate, or severe. Chronic health problems, such as AIDS, allergies, asthma, cancer, cystic fibrosis, diabetes, heart disease, and hemophilia can affect normal bodily functions. As a result the student may lack vitality, require special medical treatment or therapy, or be unable to participate in some ordinary educational activities. Many students have adjusted to their conditions well and are fully capable of learning in a regular classroom and interacting successfully with their healthy peers.

A student with a chronic health problem may have **frequent absences** from the University. The effects of medication, fatigue and pain may interrupt learning. The most important consideration for a student with a chronic health problem is an understanding instructor who is willing to make allowance for the student's absence (e.g., extended time limits for assignments, rescheduling of tests or examinations). A student who has a specialized health need will generally contact the instructor, early in the term, to discuss any other types of accommodations that may be required. However, in many cases, the instructor may not even be aware that a student has a medical problem.

The following section will provide specific information regarding students who have diabetes. Information on the University policy on students with AIDS can be found in Appendix D.

The Student with Diabetes[7]

Diabetes is a chronic metabolic disorder caused by the inadequate production of insulin or the inability of the body to use available insulin. Insulin is used in the breakdown and absorption of sugars and starches in food. Adults with diabetes can experience vision problems and kidney damage. A person with diabetes may, at times, develop either **hypoglycemia** (i.e., low blood sugar) or **hyperglycemia** (i.e., high blood sugar).

A. **Hypoglycemia**

A diabetic student can, as a result of delayed meals, excessive exercise or an overdose of insulin, develop a condition known as **hypoglycemia** (too little blood sugar). In this condition, the student is said to be having an **insulin reaction.** Such a reaction can lead to diabetic shock.

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[7] Adapted from Bauer & Shea (1989) and Larson (1986).

The onset of hypoglycemia is **SUDDEN** and often occurs around a scheduled meal time or after very strenuous activity (particularly if the student has missed a meal or eaten a very light meal). Instructors should ensure that scheduled breaks are taken, particularly for long classes that extend over a meal period, so that the students can have something to eat. Physical education teachers and coaches should always carry a source of glucose (a form of sugar) as hypoglycemia often occurs after strenuous exercise.

1. Signs of Hypoglycemia

- Numbness or tingling of lips
- Dizziness, lightheadedness
- Double or blurred vision
- Confusion, drowsiness
- Inappropriate behaviour
- Tremors or shaking
- Poor coordination
- Inattentiveness
- Irritability
- Headaches
- Hunger
- Sweating
- Seizures
- Pallor
- Coma

The signs of hypoglycemia often vary from one episode to another. However, students are usually able to identify two or three consistent signals and can treat their condition independently. However, when the student becomes confused or irritable or if the student develops poor coordination, s/he may not be able to handle the situation and action must be taken by the instructor.

2. Actions of Instructor

Verify that the student has the symptoms of hypoglycemia (i.e., ask the student if s/he has a history of diabetes or check to see if the student is wearing a diabetes ID Bracelet).

Give some form of sugar (10-15 grams) at once. Suitable foods include:

1 small box of raisins
1 Fruit Roll-up
1/2 cup regular soda (not diet) or fruit juice
6-7 Lifesavers
4-5 dried fruit pieces
5 small sugar cubes

Coax the student to eat or drink (student may be reluctant due to confused state).

Improvement should occur within ten minutes.

Encourage the student to take some additional food and then resume activities.

If no improvement, notify a physician or call the paramedics (i.e., **PHONE 911**).

B. **Hyperglycemia**

A diabetic student can, as a result of too much food, too little exercise or too little insulin develop **hyperglycemia** (too much blood sugar). In this condition the student has a build-up of ketones in the body as a result of the body utilizing fat for energy (i.e., **ketoacidosis**).

The onset of hyperglycemia is generally **SLOW**. This condition occurs less frequently than hypoglycemia.

Hyperglycemia occurs in students with undetected, untreated or poorly regulated diabetes. Physical stress (e.g., cold, flu, trauma) and emotional stress (e.g., fear, excitement) can raise the blood sugar level. Even though the onset of hyperglycemia is gradual, ketoacidosis is dangerous and can lead to **diabetic coma**.

1. Signs of Hyperglycemia

- Frequent urination
- Sweet-smelling breath
- Blurred vision
- Abdominal pain
- Dehydration (thirst and dry mouth)
- Laboured breathing
- Drowsiness
- Nausea, vomiting
- Weight loss
- Coma

2. Actions of Instructor

Verify that the student has the symptoms of hyperglycemia (i.e., ask the student if s/he has a history of diabetes or check to see if the student is wearing a diabetes ID bracelet).

Most students with diabetes manage their condition satisfactorily. However, occasionally students will omit administering the insulin (e.g., student on a field trip may inadvertently forget due to excitement). In such cases, the

instructor should encourage the student to administer an injection of insulin.

Allow large volumes of sugar-free fluids.

Local Resources

Canadian Diabetes Association
930 Pandora Avenue
Victoria, BC V8V 3P3
382-5454

PSYCHIATRIC DISABILITY

There are many forms of psychiatric illness, ranging from mild to severe. The American Psychiatric Association (APA) in the third edition of the Diagnostic and Statistical Manual (DSM III) (1980) lists the following 16 categories:

1. Disorders Usually First Evident in Infancy, Childhood, or Adolescence (including Conduct Disorders, Attention Deficit Disorders, and Anxiety Disorders)
2. Organic Mental Disorders
3. Substance Use Disorders
4. Schizophrenic Disorders
5. Paranoid Disorders
6. Psychotic Disorders Not Elsewhere Classified
7. Affective Disorders
8. Anxiety Disorders
9. Somatoform Disorders
10. Dissociative Disorders (Hysterical Neuroses)
11. Psychosexual Disorders
12. Factitious Disorders
13. Disorders of Impulse Control Not Elsewhere Classified
14. Adjustment Disorders
15. Psychological Factors Affecting Physical Condition
16. Personality Disorders

Support is available to students who have emotional difficulties from Counselling Services and from Health Services. The reader is referred to the section on Support Services for a description of the assistance available. To help instructors dealing with students who may have emotional problems, the material contained in the pamphlet "Responding to the Emotionally Troubled Student", produced by Counselling Services, follows.

Responding to the Emotionally Troubled Student

Introduction

While the university experience is often referred to as "the best years of one's life," it may be one of the most stressful times. Many students experience developmental or personal problems that interfere with their academic performance. In any community, up to ten percent of the population may be distressed by depression, acute anxiety, drug and/or alcohol abuse, or other serious problems.

While most students come to Counselling Services on their own, faculty, administrators and support staff are often the first to recognize that a student is not functioning well academically or emotionally. Students may turn to you because of your position and the respect they hold for you.

Signs and Symptoms of Stress

What are some of the signs indicating that students may need to be referred to counselling? Students who come into the Service often report having difficulty coping with their emotions, being depressed, anxious, or agitated. They may be concerned about their relationships with friends of family, about their academic performance, or about their future. While each student experiences stress differently, some common indicators include:

- Nervousness, agitation, unpredictable or inappropriate comments
- Excessive fingernail biting
- Excessive procrastination, poorly prepared work
- Infrequent class attendance with little or no work completed
- High levels of irritability including undue aggressive or abusive behavior
- Lack of energy
- Marked change in personal hygiene
- Bizarre or strange behavior
- Sadness, fearfulness
- Sleeplessness, facial pallor
- Frequent binge eating episodes or extreme loss of appetite
- Dependency (e.g., the student who hangs around you or makes excessive appointments to see you)
- Inability to make decisions

How to Make a Referral

If you feel that counselling might be beneficial to one of your students, we encourage you to refer him/her in any of the following ways:

- Suggest that the student come to Counselling Services during office hours (8:30-4:30).
- Call the receptionist at Counselling Services (8341) while the student is in your office in order to ensure that contact is made. Give the name of the student and indicate when the student will visit Counselling Services.
- Walk the student over to Counselling Services.

If you do refer a student to us, we will ask the student if we may tell you that contact with us has been made. Naturally, the communication between a counselling psychologist and a client is confidential. We

cannot and do not discuss the particulars of a student's situation or even the fact that counselling is being received, without the student's written consent.

An Example

A student comes into your office and begins to describe problems that are interfering with his/her academic work. At an appropriate break in the discussion, paraphrase in general terms what you have heard, express concern for the student, and recommend us. An illustration of these steps would be:

> It sounds as though you have been under stress, aren't doing very well, and need to talk to someone about this. I would suggest you see someone at Counselling Services. I could call and make arrangements for you right now. What do you think about that?

If the student reacts as though you are implying he/she is "sick" or "disturbed," you might reassure the student that Counselling is used by hundreds of students who face normal developmental concerns. As a result of their new experiences at UVic, they may have difficulty at times adjusting to the world around them. Sometimes, too, students find themselves under so much pressure that they begin to feel anxious or depressed. In these instances, it is helpful to gain some perspective by consulting an unbiased source, such as a counselling psychologist, who can help individuals think about their behavior and ways of dealing with the stress and the world.

Guidelines for Interaction

If the student is acting in a strange manner, agitated, or appears out of control, there are a number of guidelines that might prove helpful. It is usually helpful to consider the individual's behavior as the "right behavior in the the wrong setting," i.e., inappropriate rather than out of control. There may be a manipulative quality to the behavior -- the student may be testing the limits. Those of you who have reared children are familiar with this type of behavior. In these situations, it is important to set clear limits and to:

- Be matter of fact. Control your emotions and it may help the student to do the same.
- Be respectful, but firm.
- Be clear, simple, and direct. You may have to repeat yourself for the student to understand you.
- Try to identify the problem and respond directly and honestly about whether you can be of assistance.
- Convey to the student that you understand the problem.

- Suggest referral to Counselling (8341) or Health Services (8492) if you feel it is appropriate. If you know one of our staff, it may help to give the student a name and tell them a little about that staff member. If a student is violent or threatening violence, it may be necessary to call Traffic and Security (7599).

Consultation

If you have questions about a student and how best to approach that individual to make a referral, do not hesitate to call one of us in order to discuss the situation. If we are not available, please let the receptionist know who you are and why you are calling. We will return your call as soon as possible.

What Counselling Services Does

Our primary commitment is to have students function well in order to profit from their educational experience. We prefer to work with them before their concerns develop into serious problems. By teaching students how to manage stress and to respond to challenging and difficult situations, counsellors can assist them in developing the personal insight and interpersonal skills needed to get the most out of UVic. Counselling Services provides a variety of services, including individual and group counselling, consultation, and workshops on topics such as assertiveness training and stress management, learning and study problems, and career decisions.

The Staff

All of the Counselling Psychologists on staff are registered psychologists and, when appropriate, we work closely with psychiatrists in Health Services. In addition, practicum students in counselling, who are selected from among well-qualified graduate students, provide services at Counselling Services.

Location

Counselling Service staff are located in the University Centre on the second floor, room B202. The phone number is 721-8341.

Local Resources

Capital Mental Health Association
1450 Elford Street
Victoria, BC V8S 3S8
595-1151

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APPENDIX A

University of Victoria
Senate Statement
on Quality Teaching and Learning

A. A quality teacher is one who:

1. is knowledgeable and up-to-date in his or her subject area.
2. plans course material in accordance with credit value and time available.
3. presents material in a clear and well-organized manner.
4. makes clear to students his or her own perspective and philosophy with regard to the material and discipline.
5. is open to questions and differing opinions and is skilled at both eliciting and responding to them.
6. thinks in terms of learning process models, shares creatively his/her own process of thinking and is concerned with helping students to think both independently and critically.
7. is sensitive to the range of attitudes and experiences possessed by students of both sexes, varying cultural backgrounds, and differing ages, and is therefore able to create an open learning environment in which all students will feel they have a place.
8. is able to demonstrate and generate enthusiasm and a willingness to work, and to instill a desire in students to reach their potential.
9. is reasonably accessible to students and willing to help.
10. sets useful, challenging assignments and marks them fairly, promptly, thoroughly, and constructively.
11. has reasonable expectations as to workload.

B. A quality course is one which:

1. has a recognizable place in the overall structure of one or more programs.

2. has a selection of content, knowledge and skill valid in terms of the recognized field of learning from which it has been selected; and inclusive, wherever appropriate, of data relative to the experience of the student body in all its variety, i.e., both sexes, varying cultural backgrounds and differing ages.

3. has been organized in some rational sequence and in accordance with principles of learning theory, e.g. from the known to the unknown and from the simple to the complex.

4. provides a learning environment including texts, references, labs and equipment clearly related to subject matter and objectives.

5. is taught with a reasonable balance between sensitivity towards the total range of students in the course and respect for the discipline, using non-discriminatory language.

6. displays a range of learning activities appropriate to the field of study, the abilities of the students and the resources of the institution.

7. contains an understandable, valid and fair means of assessing achievement.

C. A quality program is one which:

1. provides for study, in depth and breadth, of a defined field of academic activity.

2. clearly demonstrates the relationship among the courses within it and affiliated to it, and sets into context its place within the wider structure of the University.

3. allows students some choice of courses and/or within courses so that they may pursue their own interests insofar as these interests are in accord with the overall aims of the program and the objectives of the course.

4. is designed in such a way as to promote and encourage participation and success in the program by students regardless of gender, varying cultural background and differing ages.

5. is staffed by adequate numbers of appropriately qualified faculty in terms of scholarship, teaching effectiveness and community and professional service.

6. has adequate resources to maintain and develop its courses in accord with its goals.

7. includes periodic assessment of goals and effectiveness in achieving them.

APPENDIX B

University of Victoria Policy on Access by the Disabled to University Services and Facilities

(dated Feb. 17, 1983*)

1. **Policy**

1.1 It is intended that disabled members of the University community be provided with reasonable opportunities of access to University services and facilities so that, to the extent their disabilities allow, such members may be integrated into the University community rather than be segregated from it.

1.2 The University shall provide reasonable opportunities of access to its services and facilities for visitors.

1.3 The Director of Student and Ancillary Services is responsible for coordinating access by the disabled to University services and for advising heads of service departments of access requirements that fall within their areas of responsibility.

1.4 The Director of Student and Ancillary Services is to arrange continuing liaison with local provincial and federal authorities involved in services to the disabled.

1.5 University buildings are to be accessible to those with impaired mobility; there shall be a continuing effort to improve such access.

1.6 Braille labels are to be affixed to most entrances and exits to assist the visually impaired.

1.7 Access by the disabled to University services and facilities is to be described in publications such as the Calendar, in specialized communications such as those available from Admissions and Counselling Services, and through University Admissions Services' presentations to prospective students.

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* Currently under revision

1.8 Disabled students are expected to make their own arrangements for specialized support services and are expected to recognize that admission to the University does not imply the availability of such specialized support services.

2. Procedures

2.1 Disabled students, faculty and staff are advised to contact Counselling Services for advice and assistance.

2.2 Disabled students are encouraged to become familiar with the extent to which access to University services and facilities is available

2.3 By request to the Office of the University Librarian, visually impaired students may obtain keys to rooms in the Library which have been reserved for their use.

2.4 By request to the Office of the Manager, Traffic, Security and Motor Pool, students, faculty and staff with impaired mobility may obtain keys for hydraulic lifts for access to certain buildings.

APPENDIX C

Words with Dignity

Reprinted from:
Active Alliance for Canadians with Disability
1600 James Naismith Drive, Suite 312
Gloucester, Ontario, K1B 5N4

People with a disability can and should be described in words and expressions that portray them in an appropriate, positive, and sensitive manner. The following guidelines are suggested and preferred by some 200 organizations that represent or are associated with Canadians with a disability.

INSTEAD OF:	**USE:**
Disabled, handicapped	Person with a disability
Invalid	Person with a disability
Crippled by, afflicted with ...	Person who has ...
Suffers from ...	Person with ...
Lame	Limited mobility
Confined, restricted or dependent on a wheelchair	Wheelchair user
Normal	Able-bodied or non-disabled
Victim, sufferer	Person with a disability
Cripple	Person with a disability
Deaf and dumb	Person with a hearing and/or speech impairment
Retarded, mentally retarded	Person with a mental handicap or person with an intellectual disability
Spastic (as a noun)	Person with Cerebral Palsy
Deformed, congenital defect	A person born with ...

The terms paraplegic, quadraplegic, and amputee are used and accepted by persons with those disabilities.

APPENDIX D

The Student with AIDS

The following material is taken from the Report to the President on AIDS and the Proposed University Policy on AIDS by Professor Lyman R. Robinson, Faculty of Law, Chair, President's Special Committee on AIDS (dated 3 February, 1989). Questions regarding students with AIDS should be directed to **Dr. William Dyson** (University Health Services, Local 8492) who serves as the University Coordinator of Responses to AIDS.

Transmission of the AIDS Virus (Part I: pp. 2-3)

The Report of the Presidential Commission on the Human Immunodeficiency Virus Epidemic states, at page 119:

> In general, because HIV [the Human Immunodeficiency Virus that is the cause of AIDS] is blood-borne and sexually transmitted, there is no need to treat those infected with HIV in a manner different from those not infected in such settings as the workplace, housing, and the schools. In the vast majority of workplace and public settings there is virtually no risk of the direct exposure to body fluids which could result in HIV transmission."

The Royal Society of Canada, in its report entitled AIDS: A Perspective for Canadians, at page 3 of the Summary Report, contains the following statement about the transmission of the AIDS virus:

> The known routes of HIV transmission are the following:
>
> - By anal intercourse with an infected person;
> - By vaginal intercourse with an infected person;
> - By using contaminated needles;
> - From an infected mother to her infant;
> - Via transfusion of infected blood or blood products;
> - Via organs transplanted from an infected donor.
>
> HIV is not transmitted by casual contact, by saliva or respiratory droplets, by insect bites, or by inanimate objects

> such as toilet seats and drinking glasses. The virus is relatively fragile and dies quickly outside the body. In seven studies, a total of 491 family members of 228 AIDS patients were carefully followed up. These studies failed to show a single instance of HIV infection among household members who did not have additional exposure through blood or sexual activity.

On the basis of these and other reports, it appears that most activities associated with an academic institution do not involve risk of transmission where there is an exchange of blood between two persons; however, there are few circumstances in the operation of the University of Victoria where this is likely to occur. Where this risk is present, special precautions should be taken.

Circumstances where Specific Policies and Procedures should be Implemented (Part I [4.0]: pp. 7-8)

There are relatively few environments or circumstances within the University where it will be necessary to develop special policies or procedures. Four environments have been identified where it is recommended that specific policies or procedures be adopted for the purpose of either minimizing the risk of transmission of the AIDS virus or protecting people from discrimination. These are Food Services, University Housing, Athletics and Recreation, and the University Health Service* ....

Athletics and Recreation (Part I [4.3]: pp. 9-10)

Participation in most athletic and recreational activities will not involve a significant risk of transmission of the AIDS virus. Therefore, it is RECOMMENDED that participation in athletic and recreational activities by persons who have AIDS not be restricted unless they have opportunistic infections or diseases that would otherwise restrict their participation.

Dr. Kendall, the Capital Regional District Medical Health Officer, stated ... that epidemiologic evidence for transmission of the AIDS virus in contact sports is "non-existent". On the other hand, the

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* The reader is referred to the University Policy on AIDS for further information regarding Food Services, University Housing and the University Health Service.

British Columbia Ministry of Health's publication entitled "AIDS: How not to get it" states:

> Don't get blood, semen or urine in ANY open cut or wound.

This warning would seem to be applicable to those "contact" sports where two or more of the participants frequently suffer cuts, abrasions or other injuries resulting in a loss of blood in circumstances where there could be contact between these injuries.

Therefore, it is RECOMMENDED that the University Policy on AIDS provide that persons, who have AIDS not be permitted to participate in University athletic activities which involve a significant risk of an exchange of blood among the participants. Furthermore it is RECOMMENDED that persons who have Hepatitis A or B not be permitted to participate in University athletic activities.

Other Environments and Circumstances (Part I [4.5]: pp. 10-11)

There may from time to time be other environments or circumstances in relation to the research activities, academic programs, co-op programs, external placement programs, or support services of the University where a significant risk of transmission of the AIDS virus exists. An example might be a department that is engaged in research involving human blood or semen .... Another example may relate to co-op or external placement programs which involve clinical interaction between students and patients....

To the extent that circumstances exist at the University of Victoria where there may be a risk of transmission of the AIDS virus, the circumstances are likely to be so diverse that it would be impractical to design a single policy or procedure to govern all of them. Therefore, it is RECOMMENDED that the University Coordinator of Responses to AIDS be assigned the responsibility of periodically reviewing the research activities, academic programs, co-op programs, external placement programs, and support services of the University for the purpose of identifying circumstances where a significant risk of transmission of the AIDS virus may exist. If such circumstances are identified, the University Coordinator of Responses to AIDS should assist the department or unit that is responsible for the activity or program to develop appropriate policies that will minimize the risk of transmission of the AIDS virus....

Participation of Persons with AIDS in the University (Part I [5.0]: p. 11)

Medical and scientific experts who prepared the Royal Society of Canada's Report on AIDS: A Perspective for Canadians assert, at page 11 of the Summary Report, that

> ... in normal day-to-day transactions ... there is virtually no risk of contracting HIV by casual contact with an infected person.

Nevertheless the fear caused by the often fatal consequences of contracting AIDS and the association of AIDS in the minds of some with certain minority segments of our society has the potential of subjecting AIDS victims to unjustifiable discrimination.

Therefore, it is RECOMMENDED that policies be adopted to ensure that applicants for admission to the University are not discriminated against because they have AIDS. Similarly, it is RECOMMENDED that students who have AIDS should not be restricted in the programs or courses in which they enrol unless the nature of the work that is required to be performed by the student creates a significant risk of transmitting the AIDS virus to others or they have other opportunistic infections or illnesses which would restrict their enrollment or continuation in the program or course ....

Use of Public Facilities by Persons with AIDS (Part II [5.5]: p. 20)

All members of the University community who have AIDS may use public facilities such as food service facilities, gymnasia, athletic and recreational facilities, swimming pools, bathing facilities, toilets, theatres, classrooms and similar public areas.

Confidentiality (Part I [6.0]: p. 12)

One of the means of protecting persons with AIDS from unjustifiable discrimination is to maintain the confidentiality of the medical information about their affliction with AIDS and to restrict the access to that information to those persons who need to know because of their administrative responsibilities at the University. The need for confidentiality is reinforced by a desire to encourage those who suspect

that they may have contracted AIDS to undergo voluntary testing and, if the test is positive, take precautionary measures to avoid transmitting the AIDS virus to others. Therefore, it is RECOMMENDED that unless the person who is the subject of the information consents to its disclosure, medical information and records about a member of the University community who has AIDS be kept confidential and that access to this information be restricted to those who, because of their administrative responsibilities, have a need to know.

Responsibility of Persons with AIDS (Part II [8.1]: p. 21)

Members of the University community who have AIDS or who have reason to suspect that they may have been infected with the HIV virus have a responsibility to conduct themselves in a manner that will minimize the risk of transmitting the HIV virus to others.

Reporting Dangerous Circumstances Relating to AIDS (Part II [9.0]: p. 21)

Staff members, who, in the course of their employment become aware of circumstances that may present a significant risk of transmission of a communicable disease, including AIDS, have a responsibility to report the circumstances to their supervisor or to the University Health Service in order that appropriate action may be taken to alleviate the risk or to warn those who may be in danger.

Local Resources

AIDS Vancouver Island
106-1175 Cook Street
Victoria, BC V8V 4A1
384-4554